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# FINANCIAL TIMES

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## NEWS SUMMARY

### GENERAL

## Schild's wife free — Pope

Pope John Paul announced that the kidnapped wife of British electronics engineer Rolf Schild was released eight weeks ago. The Pope also appealed for the release of the Schild's daughter, Annabelle, 15.

His surprise announcement to a crowded St Peter's Square ends a carefully observed news blackout by British media. His appeal, he said, was made with the family's agreement.

Mr. Schild, 55, his wife, Daphne, 51, and his daughter were seized last year near their Sardinian holiday home.

### Olympic boycott

Many Tory MPs may refuse to support the Government's call for a boycott of the Moscow Olympics in today's Commons debate unless it is matched by further trade sanctions against Russia. Back Page

### Soames returns

Rhodesia's Governor Lord Soames flew home for brief talks on future relations between Britain and Zimbabwe amid reports in Salisbury that Methodist minister Rev. Canaan Banana will become president of the republic. Page 2

### Confidence vote

Italy's minority Christian Democratic government is expected to face and lose a parliamentary vote of confidence this week, throwing the country into its 42nd political crisis since the War. Back page

### Corruption probe

Attorney General Sir Michael Havers admitted that police officers had fabricated evidence against criminals to stop them from giving evidence to the Operation Countryman probe into London police corruption.

### Early leaders

Iran's pro-clergy Islamic Republican Party emerged as early leaders from Friday's parliamentary election winning 20 of the 21 seats so far declared. President Bani-Sadr's supporters won seven. Page 2

### Moroccan defeat

Moroccan troops appeared to have surrendered a large part of southern Morocco to West Saharan Polisario guerrillas after an 11 day battle. The guerrillas claim they killed 2,000 troops.

### BL sales up

BL said the 10 per cent price cut offer on its Maxi cars was paying off with sales up 60 per cent for the first 10 days of March compared with February.

### Ford stays out

Former US President Gerald Ford decided not to run against Ronald Reagan for the Republican's presidential nomination because it might split the party. Page 2

### Tito still grave

President Tito, still critical, rallied slightly and his doctors reported signs of an improvement in his weakened heart and a halt to the spreading of pneumonia.

### Briefly

Winner of £100,000 premium bond prize is GTP 888776 (London), £50,000 prize winner is 18VB 595022 (Manchester) and the £25,000 winner is 4DL 573241 (Cardiff).

### CONTENTS

U.S. economy: Carter in unmapped territory ...	10
Management: Good engineers need management expertise	7
Liverpool: Row over the waterfront	11
Lombard: Samuel Brittan on King Canute and interest rates	8
Courts: Matters of confidence	8
U.S. Economic Package: Editorial comment	10
Editorial comment: U.S. economy: Threat to Europe	10
Survey: India	Inset

Letters ... 11  
Advertisement ... 12  
Building News ... 6  
Businessmen's Dry ... 6  
UK Comp'ny News ... 12  
Entertainment ... 8  
Financial Diary ... 12  
Int. Co. News ... 15  
Labour News ... 4  
Leader Page ... 10

Sport ... 11  
Today's Events ... 11  
TV and Radio ... 8  
Unit Trusts ... 12  
World Econ. Ind. ... 10  
World Trade ... 2

ANNUAL STATEMENTS

1. Letters ... 11  
2. Insurance ... 6  
3. Lombard ... 6  
4. Management ... 7  
5. Men and Matters ... 10  
6. Money and Exchange ... 12  
7. O'Neills News ... 12  
8. Party Diary ... 15  
9. Racing ... 8  
10. Share Information ... 10-19  
11. Sport ... 11  
12. Today's Events ... 11  
13. TV and Radio ... 8  
14. Unit Trusts ... 12  
15. World Econ. Ind. ... 10  
16. World Trade ... 2

Murray Weston ... 12

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THE CHARTS SHOW THE TWO CONSTRAINTS ON THE EUROPEAN MONETARY SYSTEM EXCHANGE RATES. THE UPPER GRID, BASED ON THE WEEKEND RATES, DENOTES THE CROSS-RATES FROM WHICH NO CURRENCY (EXCEPT THE IRISH) CAN MOVE WITHOUT A 2% MOVE. THE LOWER GRID GIVES EACH CURRENCY'S DIVERGENCE FROM ITS "CENTRAL RATE" AGAINST THE EUROPEAN CURRENCY UNIT (ECU), ITSELF A BASKET OF EUROPEAN CURRENCIES.

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CHANGES in the present system of monetary control, resulting in greater flexibility of short-term interest rates, will be proposed towards the end of this week in the long-awaited Government consultative document.

The paper will discuss a number of options, but it is expected to say the Government has not yet been persuaded of the advantages of moving to a fully-hedged monetary base system in which the Bank of England would directly control the cash base of the banks.

Under this system, interest rate changes would be automatic and rates would probably become more volatile.

Instead, the Government is likely to favour a hybrid system in which it retains some discretion over interest rates but in which there is a prompter adjustment to correct divergences from the desired path of monetary growth.

This could mean more frequent changes in the cost of overdrafts than at present, though there is generally a desire to minimise the impact

of any proposals on the public. Existing corset controls on the growth of the banks' operations are likely to be scrapped within the next few months.

The main proposal is likely to involve a redefinition of the reserve assets ratio in order to make it a more effective control on the banks' operations.

At present, banks are obliged to keep at least 12% of total deposits in the form of reserve assets, ranging from balances at the Bank to gilt-edged stock with maturities of less than a year.

This range of assets may change and the ratio could be varied for different sizes of banks. The key question is whether new and shorter-dated government securities will be issued.

The subject will be discussed in a Treasury paper, with technical annexes, and the detailed proposals will be made available separately and circulated within the City by the Bank.

The paper will be consultative but firm decisions about the balance of changes will be indicated. Affected parties will

be invited to comment on how such a system might work in practice.

The paper's emphasis is likely to be on the limited and modest nature of the changes. This is in line with recent Ministerial statements that there are "no magic mechanisms" for ensuring monetary control and that what matters is the right level of public sector borrowing and interest rates.

The main issues have been the extent to which the system should be fully automatic, and the implications for exchange rate policy.

The dilemma for the Government has been increased by the rise in interest rates last November and by the recent shortage of money market liquidity which has been relieved by the Bank in order to prevent a further rise in rates.

The possibility that Minimum Lending Rate might have had to rise further in recent weeks if a fully automatic monetary base system had been in operation has made such a change less likely.

## Cigarette adverts agreement near

BY DAVID CHURCHILL, CONSUMER AFFAIRS CORRESPONDENT

NEW CURBS on cigarette advertising are expected to be announced in advertising on television.

advertising in tobacco duty in next week's Budget.

The Department of Health is understood to have had to back-track from its original demand for a total ban on all cigarette advertising except inside shops.

But the new agreement, which will replace the voluntary one in force for the past three years, is almost certain to mean the end of cigar and tobacco advertising except inside shops.

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## OVERSEAS NEWS

## New impetus to Mid-East initiative

BY OUR FOREIGN STAFF

THE MEETING in Hamburg between Chancellor Helmut Schmidt of West Germany and President Valery Giscard d'Estaing of France may give extra impetus towards a new Middle East peace initiative by the European Community, and enunciation of a more precise collective stand on the question of the Palestine Liberation Organisation.

Relations between the Nine and the Arab world were expected to be one important aspect of last night's talks, in particular President Giscard's forthright declaration in favour of the principle of Palestinian self-determination and his clearly stated support for PLO participation in peace negotiations.

Chancellor Schmidt has already endorsed the call made by President Giscard for a joint French-Kuwaiti communiqué two weeks ago.

It followed discussions within the EEC led by Britain on the possibility of a move by the Nine to amend the UN

Security Council Resolution 242 to take account of the principle of Palestinian self-determination.

In an interview given following his talks with President Giscard, King Hussein of Jordan said he anticipated fresh efforts by the EEC to bring about a comprehensive Middle East settlement which "will not have to await conclusion of yet another U.S. Presidential election."

King Hussein told the Beirut-published magazine *Mondays Morning* that he expected the French leader to lead an initiative aimed at breaking the "Mid-East deadlock." It would not have to be conducted within the framework of the Camp David accords between Egypt and Israel.

King Hussein spoke of his preference for involving the UN Security Council and both super-powers in the peace process.

Any new initiative would intensify the vigorous campaign being waged by Israel against

any action by the Nine interfering in any way with the Egyptian-Israeli negotiations on autonomy for the inhabitants of the West Bank and Gaza Strip.

When he met Mrs Thatcher in London last week, Mr. Yigael Yadin, the deputy Israeli Prime Minister, argued that any move by the Nine at this moment could only jeopardise the chance of the U.S.-sponsored negotiations being concluded satisfactorily by the May 26 deadline.

Mr. Yadin described the talks as "friendly and frank."

On Friday, Mr. Yadin also predicted that another trilateral summit like those held at Camp David would be required if agreement was to be reached.

The Israeli Government, meanwhile, has urged a speed-up in the autonomy negotiations. Mr. Joseph Burg, Minister of the Interior and chief Israeli participant in the talks has cabled Mr. Mustapha Khalil, the Egyptian Premier, and Mr. Sol Linowitz, the U.S. mediator proposing weekly top-level meetings in parallel to those of various

working parties.

Roger Matthews reports from Cairo: Egyptian anger at President Jimmy Carter's Middle East policies surfaced yesterday in an unprecedented attack on the U.S. Administration by one of President Anwar Sadat's closest confidants.

Mr. Carter was "indecisive and unable to rally western support or confront the Soviet Union," Mr. Anis-Mansour, editor of *Oktober* magazine, said in this week's edition. Mr. Mansour's articles are widely accepted as being an accurate reflection of President Sadat's views.

Mr. Carter's recent volte-face over the U.N. Security Council vote on Israeli settlements in the occupied West Bank and Gaza Strip had caused the world to lose confidence in the U.S. President, he went on.

Israel and Egypt last night initialised an agreement setting up a direct airlink between them; effective from today, Reuter adds. They will operate three flights a week between Tel Aviv and Cairo. Reuter was prepared to pay.

## WORLD TRADE NEWS

## Nott rejects added limits to textile, clothes imports

BY RHYS DAVID

MR. JOHN NOTT, the Secretary of State for Trade, has given a firm indication that the Government is not prepared to seek any further tightening of restraints on imports of textiles and clothing into the UK.

Mr. Nott, replying to a letter from Mr. Ben Ford and Mr. Nicholas Winter, chairmen respectively of the all-parliamentary groups on wool and cotton, has made a strong defence of the existing arrangements which he claims offer more comprehensive protection for the textile industry than at any other time in its history.

He also challenges the industry to back up its claims of alarming growth in fraud, dumping and other unfair practices by suppliers to the UK market with firm evidence, stating that the Government will take up pay for the the worst for 40 years.

Mr. Nott says in his letter that he recognises the difficulties now being caused by the high value of sterling, by changes in fashion and technology and by low and falling demand for some products. He goes on to say that none of these problems makes it sensible for the UK to undermine the established rules governing its trade relations with the rest of the world.

"Millions of jobs depend on the maintenance of open markets for our own exports overseas including textile and clothing exports which alone amounted to £2.1bn in 1979. In considering any protective

barriers to contain imports from abroad we have to give the closest possible attention to the impact of such action on our ability to continue to export."

The Minister confirms the Government's commitment to maintenance of the present GATT Multi-Fibre Arrangement (MFA) and to firm enforcement of the bilateral agreements contained within it. He warns, however, that it would not be possible to negotiate any cut-back of existing quotas on the grounds that this would be contrary to the EEC's international obligations and would be unlikely to command support from the EEC Commission and other member States.

An early statement on the possibility of introducing compulsory origin marking for certain consumer goods, including clothing and textiles, is also promised as soon as consultations are completed with the industries concerned.

## Lambsdorff to discuss Polish debt

By Roger Boyes in Bonn

COUNT OTTO LAMBSDORFF, the West German Economics Minister, flew to Warsaw yesterday for high-level talks crucial to Poland which is plagued by slow growth, the effects of a poor harvest, and a crippling debt service ratio. The talks are expected to deal with wide-ranging Polish proposals for new economic projects, the state of Poland's large foreign debt and with the general health of East-West relations.

The visit is an important political sign that Bonn is prepared to keep open vital trade links with Eastern Europe despite the Soviet invasion of Afghanistan.

The talks were originally scheduled for January but were cancelled at short notice, officially because Warsaw had just put forward plans for joint projects which needed closer study.

Officials are vague on the details of these new projects, but they seem to embrace three main elements. First, the broadening of export credit guarantees to Poland—and thus maintaining the impetus of German trade with Poland, given the increasing wariness of private banks to provide the needed credit backing. Second, Bonn has agreed at the latest meeting of the joint German-Polish economic commission to encourage the import of Polish manufactured goods. Finally, Germany is particularly eager to help develop Poland's considerable deposits of raw materials, including copper, vanadium and titanium.

Underpinning these considerations, there is Poland's large debt with the West—variously estimated at between \$17bn and \$18bn. The Lambsdorff trip is not expected to produce any concrete moves forward on this issue but Poland has clearly made various soundings to the West.

It was revealed last week that Poland has discreetly refinanced an official French export credit of over \$312m and agreed to accept much harder terms.

Politically, Count Lambsdorff's visit is in line with Bonn's view that East European countries should be treated differently from the Soviet Union. Germany welcomed the recent Polish call for a European disarmament conference, which seemed to indicate that the East was still prepared to talk on arms control, even after the NATO decision to re-equip its theatre nuclear forces in Europe.

French jobless rise to 1.39m

FRANCE - UNEMPLOYMENT rose 0.9 per cent to a seasonally adjusted 1.39m last month, David White reports from Paris. The February figures, which showed an 8 per cent deterioration since the same time last year, marked the 5th consecutive monthly increase in the numbers of unemployed.

Unfilled vacancies, which passed the 100,000 mark in adjusted terms, increased 3.3 per cent since January and more than 26 per cent since February last year. This reflected recent reforms aimed at improving the workings of the National Employment Agency, the Ministry said.

Swiss trade deficit

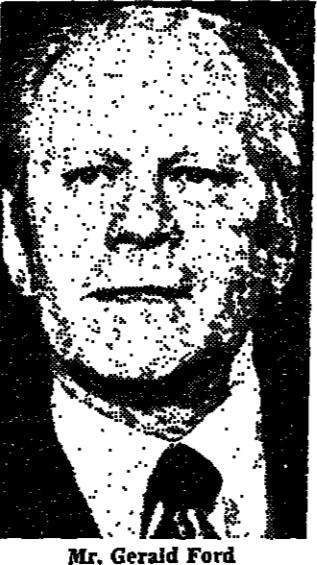
Switzerland's trade deficit rose to SwFr 1.1bn in February, from SwFr 919m in January and SwFr 365m in February last year. The Federal customs office said, Reuter reports from Berne. This is the first time the deficit for one month exceeded SwFr 1bn, the office added.

Venezuela cutback

Venezuela plans to cut its oil production by more than 10 per cent to daily average of less than 2m barrels, the state news agency Venpress reported. Reuter reports from Caracas. Sr. Humberto Calderon Berti, Oil Minister, was quoted as saying the new reduction was caused by "circumstantial market reasons."

## Ford stays out of election race

By JUREK MARTIN, U.S. EDITOR IN WASHINGTON



Mr. Gerald Ford

MR. GERALD FORD, the former U.S. President, will not be a candidate for the Republican Party's Presidential nomination this year, he declared at the weekend.

His decision, after weeks of intense speculation that he would belatedly enter the race, reflects the weight of advice from the party's hierarchy that though he might well be the most electable Republican in the November general election, his chances of getting the nomination were slim and would be potentially costly.

His brief statement, issued from his California desert home, said: "America needs a new President. I have determined that I can best help that cause by not being a candidate for the President, which might further divide my party. I am not a candidate. I will not become a candidate. I will support the nominee of my party with all the energy I have."

The three remaining contenders are Mr. Ronald Reagan, Mr. John Anderson and Mr. George Bush, all campaigning in Illinois before that State's primary tomorrow, welcomed Mr. Ford's decision.

## Hard-liners winning in Iran poll

By SIMON HENDERSON IN TEHRAN

THE CLERGYMEN who take a tough position on the release of the U.S. hostages in Tehran are emerging as the early leaders as results come in from Friday's elections for the 270-member Iranian parliament.

President Abol Hassan Bani-Sadr has already led to accusations of unfair practices at polling stations. The President, in response to these accusations and conceivably as a sign of his intentions, yesterday told the official Paris News Agency that the elections would be declared null and void where there had been malpractice.

Ayatollah Khomeini has said the 270-seat Parliament would decide the fate of the 50 hostages, who have been held for four and a half months. The Islamic Republics still tie their release to the return of the Shah and his wealth, while Mr. Bani-Sadr has been attempting to separate the issues.

Parliament is not expected to start sitting before next month.

What appears to have gone wrong for Mr. Bani-Sadr is that

he failed to organise a political structure to follow up his 75 per cent victory in the presidential elections, when the Islamic Republican candidate was heavily defeated.

Most accusations of malpractice have been made against the Islamic Republics in Tehran, where results are not expected for a few more days, their lists of candidates were said to have been put inside the polling stations, where only the official list of all the candidates should have been available.

Reuter adds from Rome: The Italian Government has authorised the supply to Iran of 10 Chinook helicopters and helicopter spares previously blocked by the holding of the hostages.

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## Soames flies to London aid talks

By QUENTIN PEEL IN SALISBURY

LORD SOAMES, the Governor of Rhodesia, left Salisbury last night for London, for talks with his British Government colleagues on aid for the future independent Zimbabwe, as reports in Salisbury suggested that his successor as titular Head of State would be the Rev. Canaan Banana, a Methodist minister from Bulawayo and a former political detainee.

The departure of the Governor for three days of talks, a sign of growing confidence in the post-election stability in Rhodesia, comes as Mr. Mugabe is facing a further round of important decisions on which senior civil servants to choose to head his new Ministries.

Lord Soames' talks with Lord Carrington, British Foreign Secretary, and other members of Mrs. Thatcher's Cabinet, will subsequently as a leader of the Prime Minister.

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Sr. Humberto Calderon Berti, Oil Minister, was quoted as saying the new reduction was caused by "circumstantial market reasons."

## U.S., China hydro-pact

By TONY WALKER IN PEKING

U.S. and Chinese officials signed an agreement at the weekend which opens the way for large-scale U.S. assistance in the development of China's hydro-power industry.

Mr. Mondale also notified the Chinese that America was prepared to provide up to \$2bn in bank loans for approved projects.

It was premature to suggest that China would use these funds to develop hydro-electric projects, the official said. The ExIm Bank had not yet cleared formalities which would allow it to arrange finance for any projects. Bank officials would visit China soon to discuss such arrangements.

Among the American utilities party to the agreement is the Bonneville Power Authority.

The U.S. delegation, led by Mr. S. David Freeman, chairman of the Tennessee Valley Authority, has been visiting China for the past few weeks inspecting hydro-power sites.

The co-operation agreement follows the visit to China last August by Mr. Walter Mondale, U.S. vice-President, Mr. Mondale

is also expected to provide technical expertise.

## Former Uganda leaders may fight elections

By NAIROBI

President Godfrey Binaisa of Uganda said that Dr. Milton Obote and Mr. Yusuf Lule, the two former presidents, were welcome to return home to contest the Ugandan elections, Radio Uganda said yesterday.

The radio, monitored in Nairobi quoted Mr. Binaisa as saying the ruling National Liberation Front did not fear contesting elections, due to be held by June 1981, and called on former leaders in exile to return in time to campaign.

Dr. Obote said in Dar es Salaam on Wednesday that he would return to Uganda to contest elections there as soon as they were announced. Mr. Obote is living in Britain. Reuter

signed a protocol with the Chinese under which America agreed to assist in the development of China's hydro-electric potential.

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## Iran delays resuming gas exports to Russia

By SIMON HENDERSON IN TEHRAN

IRAN IS delaying resumption of gas exports to the Soviet Union after pipeline breakages, as a lever for obtaining a higher price for the gas, in current negotiations.

Mr. Carter was "indecisive and unable to rally western support or confront the Soviet Union," Mr. Anis-Mansour, editor of *Oktober* magazine, said in this week's edition. Mr. Mansour's articles are widely accepted as being an accurate reflection of President Sadat's views.

limits  
imports

## BUSINESSMAN'S DIARY

## UK TRADE FAIRS AND EXHIBITIONS

Date	Title	Venue
Mar. 17-21	Brewer '80—International Brewing, Bottling and Allied Trades Exhibition (021-705 6707)	NEC, Birmingham
Mar. 17-21	International Packaging Exhibition—PAKEX (021-705 6707)	NEC, Birmingham
Mar. 25-28	London Fashion Exhibition (01-885 1200)	Olympia
Mar. 26-28	Viewdata '80 Exhibition (0895 3262)	Wembley Conference Centre
Mar. 28-Apr. 8	Birmingham Motor Show (0602 51262)	Bingley Hall, Birmingham
Mar. 30-Apr. 1	British International Footwear Fair (01-437 6734)	NEC, Birmingham
Mar. 30-Apr. 2	GLASSEX '80 Glass and Technology Exhibition (01-553 4888)	NEC, Birmingham
Apr. 3-8	National Boys and Girls Exhibition (0532 620361)	Alexandra Palace
Apr. 9-10	Educational Equipment Exhibition (01-247 6326)	Harrogate
Apr. 15-19	Ideal Home Exhibition (0727 312850)	City Hall, Hull
Apr. 19-21	Optralair '80 (01-405 5101)	Earls Court
Apr. 21-25	International Fire, Security and Safety Exhibition—IFSEC (01-388 7661)	Olympia
Apr. 22-May 2	International Machine Tool Exhibition—MACH 80 (01-402 6671)	NEC, Birmingham
Apr. 28	International Food and Wine Exhibition (06284 2442)	Exhibition Centre, Leeds
May 2-5	Audio Visual Exhibition (01-688 7788)	Wembley Conference Centre
May 2-6	Spring Motor Cycle Show (04388 74987)	Bingley Hall, Birmingham
May 3-5	Boat Show (0272 657783)	Exhibition Centre, Bristol
	National Collectors Exhibition (01-629 4917)	Kensington Town Hall

## OVERSEAS TRADE FAIRS AND EXHIBITIONS

Current	World Photographic Exhibition—WORLD PHOTO (021-705 6707) (until March 21)	Singapore
Current	Middle East Business Equipment Show (01-496 1251) (until March 20)	Bahrain
Mar. 21-24	International Personal Leathergoods—SELEPEL Conference, Chocolate and Biscuits (01-439 3964)	Florence
Mar. 22-26	Spring Fair (01-935 8200)	Paris
Mar. 23-31	Machine Tool Exhibition—METAV (01-408 6945)	Dubai
Mar. 27-Mar. 31	British Aviation Equipment Exhba. (01-215 7877)	Dusseldorf
Apr. 7-10	World Fabric Fair (0532 466611)	Shanghai
Apr. 13-15	MODEXPO '80: International Ladies Fashion Fair	Geneva
Apr. 15-19	Transport—Expo '80 (01-483 3964)	Zurich
Apr. 16-24	Hanover Fair (01-651 2191)	Paris
Apr. 21-25	World Tobacco Exhibition (0737 68611)	Hanover
Apr. 21-26	Scientific and Measurement Apparatus Exhibition (INSTRUAMA) (01-233 5422)	Nice
Apr. 24-28	Perfumery and Cosmetics Exhibition—COSMOPROF	Brussels
Apr. 28-May 2	Biochemical and Instrumental Analysis Exhibition (ANALITICA) (01-486 1951)	Bologna
May 8-8	Compe Europe Exhibition (01-261 8000)	Munich

## BUSINESS AND MANAGEMENT CONFERENCES

Mar. 17-21	Brunei Institute: The Effective Organisation (0895 58461)	Uxbridge
Mar. 18	LOCIS: Industrial Investment in Tunisia (01-248 4444)	Cannon Street, EC4
Mar. 19-20	CCC: Foreign Currency Assets and Liabilities (01-223 5352)	Royal Lancaster Hotel, W2
Mar. 19-21	Gower Conferences: International Insurance Conference (01-242 9485)	Amsterdam
Mar. 20	BACIE: The Impact of Microelectronics on Industry and Commerce (01-635 5351)	Connaught Hall, WC1
Mar. 24-25	FT Conference: Business Premises and Profitability (01-336 4382)	Hilton Hotel, W1
Mar. 24-25	Law and Business Inc: New Techniques in Acquisitions of U.S. Companies (01-267 4466)	Portman Hotel, W1
Mar. 24-28	Kepner-Tregoe: Decision Making for Senior Management (0638 38083)	Whately Hall Hotel, Banbury
Mar. 25	Institute of Directors annual convention: Prosperity or Poverty?—the last chance for choice (01-895 1233)	Royal Albert Hall
Mar. 26	Henley School for Forecasting: Costs and Price Forecasts to 1985 (01-333 9961)	London Press Centre
Mar. 26-27	Sally Tempier-Charles Simeon: Control of Toxic Substances (01-895 1791)	Piccadilly Hotel, W1
Mar. 26-28	Frank Jenkins School of Public Relations: Planned Press Relations (01-567 2911)	Cornhill Rooms, WC2

## Financial Times Conferences

## European Offshore Conference

June 18 & 19, 1980 — London  
The Financial Times will be following up its successful conferences on North Sea Oil with a further examination of the latest developments with special emphasis on the role of the UK and Norway. Aspects of the exploration, production and potential of oil and gas resources in the North Sea will be studied and the implications of the UK and Norwegian work for Europe and world energy problems will be examined.

The Secretary of State for Energy, the Rt Hon. David Howell MP will be a key note speaker alongside a spokesman from the Norwegian Ministry.

## The New Sri Lanka — Opportunities for Business

September 4 & 5, 1980 — Colombo  
The Financial Times has decided that the timing for a conference to examine the official promotional activities for the economic development of Sri Lanka is opportune. The conference will aim to examine the business opportunities and incentives offered in those areas of significance to the general economic development of the country. The conference also will present to Sri Lankan businessmen and officials in the private sector, the opportunities offered for strengthening development through overseas investment and co-operation.

This conference will offer opportunities for businessmen not only to appreciate a wide ranging international view of the Sri Lankan situation but also to meet up with business colleagues and to take advantage of the opportunities to visit areas of economic development in the country.

All enquiries should be addressed to:

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## INSURANCE

## Growth of private medical cover

BY OUR INSURANCE CORRESPONDENT

THE NUMBER of people insured under private medical schemes (and those offered by British United Provident Association, Private Patients' Plan and Western Provident Association, which comprise about 98 per cent of the market) is growing again after a downturn in the last decade.

But still larger discounts are available for employee schemes — partly to reflect the saving in administrative cost, partly to reflect the reduction in selection against the associations by having a spread of averagely healthy members.

For the individual buyer, for the member of a small group, medical history normally forms part of the information that the associations require. But where a medium or larger group is to be covered, individual medical histories are not of underwriting significance.

The majority, about 80 per cent of the total, are insured through group schemes arranged by employers. Financial arrangements vary, but it is quite common for the employer to pay a premium for the employee's cover, leaving the employee to find the money to insure his family.

But in the final analysis the question of who pays is academic, for if the employer pays, the premium is regarded as part of the employee's income and aggregated with the rest of his income for tax purposes. And there is no tax relief obtainable on private medical insurance premiums any more than there is on disability or permanent health premiums.

But when the claim has to be made, subject to adequacy of the financial limits of the particular scheme, the claimant gets his bills paid in full: there is no tax bite.

Claims are met on an indemnity basis: if, for example, the surgeon's fee is £250, while the financial limit of the policy is £300, then £250 is all that is payable—the claimant cannot pocket the other £50.

From the subscriber's point of view, membership of a group scheme enables him to get his cover at a reduced premium. Indeed, small premium discounts are given by the three main associations for group membership, irrespective of their being fellow employees.

Reflecting modern business needs, the associations provide cover abroad to the same level as in the UK, for both business and pleasure trips, as long as these are of short duration and do not entail permanent residence overseas.

## This week in Parliament

## TODAY

COMMONS—Debate on Government motion calling for boycott of the Moscow Olympic Games.

LORDS—Competition Bill, third reading. Motion to Approve Prevention of Terrorism (Temporary Provisions) Act 1978 (Continuance) Order 1980. British Aerospace Bill, committee stage. Debate on effective machinery for auditing the second stage of the road planning process.

SELECT COMMITTEE—Home Affairs, Science and Arts. Subject: The funding and organisation of courses in higher education. Witnesses: (TBC).

SELECT COMMITTEE—Home Affairs. Subject: The law relating to public order, processions and public meetings. Witnesses: National Council for Civil Liberties (Room 8, 4.30 pm).

## TOMORROW

COMMONS—Social Security Bill, remaining stages.

LORDS—Reserve Forces Bill (consolidation measure). Consideration of Commons amendments. Consolidated Fund (No. 2) Bill, all stages. British Aerospace Bill, committee stage. Motion to approve Southern Rhodesia (Constitution of Zimbabwe) (Elections and Appointments) (Amendment) Order 1980. National Health Service (Invalid Direction) Bill, second reading. Companies Bill, consideration of Commons amendments.

## WEDNESDAY

COMMONS—Social Security Bill, completion of remaining stages. New Hebrides Bill. Subject: Assistance to industry schemes, colleges of

remaining stages.

LORDS—Debate on co-operation between the National Health Service and the independent medical services during the past 30 years. Debate on the need to conserve energy. Debate on the closing of small village schools.

SELECT COMMITTEE—Education, Science and Arts. Subject: The funding and organisation of courses in higher education. Witnesses: (TBC).

THURSDAY

COMMONS—Debate on EEC documents relating to the Common Agricultural Policy and the Community Budget.

LORDS—County of Kent Bill, second reading. National Health Service (Invalid Direction) Bill, remaining stages. Debate on Liberal motion to disapprove the Immigration Rules.

SELECT COMMITTEE—Agriculture. Subject: Economic, social and health implications for the UK of the Common Agricultural Policy on milk and dairy products. Witnesses: British Multiple Retailers Association, National Food and Drink Federation, Voluntary Groups Association.

FRIDAY

COMMONS—Private Members' motions.

education. Witnesses: Northern Ireland Department of Commerce, Northern Ireland Department of Education (Room 16, 4 pm). Social Services. Subject: Examination of proposals in Rayner study on payment of benefit and sub-post offices. Witnesses: Sir William Barlow, chairman of the Post Office, and other officials. (Room 15, 4.30 pm).

THURSDAY

COMMONS—Debate on EEC documents relating to the Common Agricultural Policy and the Community Budget.

LORDS—County of Kent Bill, second reading. National Health Service (Invalid Direction) Bill, remaining stages. Debate on Liberal motion to disapprove the Immigration Rules.

SELECT COMMITTEE—Agriculture. Subject: Economic, social and health implications for the UK of the Common Agricultural Policy on milk and dairy products. Witnesses: Sir Hywel Evans, Permanent Secretary, Welsh Office, and other officials. (Room 8, 4.15 pm). Foreign Affairs. Subject: The consequences of Soviet expansion for British foreign policy: The Soviet background. Witnesses: Dr. R. Conquest and Professor J. Erickson (Room 15, 4.15 pm).

Industry and Trade. Subject: Import and Export Trade. Witnesses: CBI (Room 16, 10.45 am). Public Accounts. Subject: Assistance to industry schemes, colleges of

couple and from £6.50 to £10 for single-parent families.

The council says the measures could be financed partly by lower EEC contributions, by a higher tax taken from North Sea oil and by a "windfall" tax on bank profits.

The Low Pay Unit says extending the income band charged at the lower 25 per cent rate from £750 a year to £2,000 would reduce the tax bill of the average family by £1.20 a week.

The unit also recommends a rise of £1.75 a week in child benefit.

Child benefit should be raised from £4 to £5 for married

and £2.50 for single-parent families.

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**Budget aid to lower - paid urged**

BY DAVID MARCH

THE GOVERNMENT should assist below-average earners by cutting the tax burden on the lower-paid in the Budget, according to the National Consumer Council and the Low Pay Unit.

The Consumer Council's pre-Budget recommendations call for a package costing £2.5bn, to be spent principally on raising personal tax allowances, child benefits, pensions and maternity grants.

The Low Pay Unit says the tax burden of the lower-paid has increased despite last year's "tax-cutting Budget".

It suggests an extension of the

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US Department of Commerce Statistics for the period '74-

## Paintmakers forecast 30% price rises

BY SUE CAMERON, CHEMICALS CORRESPONDENT

PRICE rises of about 30 per cent this year for industrial paints and coatings are forecast by the Paintmakers' Association. This follows an average increase of 29.5 per cent last year.

The association said the rises reflected UK paintmakers' efforts to recover "very severe" increases in the cost of raw materials. But it warned these attempts were not proving wholly successful.

Raw materials account for about 80 per cent of the production costs of industrial coatings, a sector which includes car paints, can lacquers, wood finish and powder coatings. Last year the cost of white spirit and xylol rose 33.5 per cent and 38.1 per cent respectively.

Contract prices for naptha, the oil-based feedstock which is vital to the petrochemicals industry, rose 47 per cent in the seven months to last January.

"There is no question that such increases so far back in the raw materials chain will pose severe problems for the paint industry during 1980," the association said.

It said the cost of some non-

oil-based raw materials used in the production of industrial paints scarcely increased last year, yet the association's cost index of all commodity raw materials had climbed by more than 17 per cent in the past nine months. This figure took "no account of sharper increases in distribution, labour and packaging costs."

Producers of decorative paints, which account for 54 per cent of the paints industry, had been even less successful than industrial coatings manufacturers in raising their prices to adequate levels.

Instead Mr. Healey argued that Labour should be loyal to its international traditions, learning from the experience of successful socialist parties on the Continent, and accepting the limitations on national freedom of action resulting from any attempt to reach international agreement on the many problems created by the oil crisis.

After noting the case for selective controls for particular sectors under temporary threat, he said: "to rely on general import controls to make industry more competitive is trying to cure the symptom rather than the disease."

Even if general import controls could be set up without

PROPOSALS FOR a general strategy of import controls were strongly rejected by Mr. Denis Healey, Shadow Chancellor, in a weekend speech on domestic and international economic policy.

In the Lady Morgan Memorial Lecture in Cardiff on Saturday, Mr. Healey attacked both the Government's concentration on monetary control and the protectionist route (favoured, though he did not say so, by many on the Labour Left).

He urged the need for agreement between at least some oil-producing countries and consumers in which the latter would get guarantees of output over a period of years, in return for the OPEC countries getting guarantees of a satisfactory price for oil.

"Britain should take the lead in persuading the major industrial countries to develop a programme of concerted action to achieve greater convergence in their economic performance, as the Labour Government did successfully at the Bonn summit in 1978."

Domestically, Mr. Healey said in view of the high level of savings and the low level of capacity use, public-sector borrowing should be much bigger and monetary growth much higher than the Government is planning.

It should be prepared to intervene more actively in the foreign exchange markets, at the price of seeing the money supply rise beyond its present target.

• Philip Rawstone writes: Unless import controls were introduced on manufactured goods, Britain's textile mills, car and engineering factories would become "museum pieces." Mr. Ron Hayward, Labour Party general secretary, said yesterday.

Such short-term measures should be used as a framework for developing a successful industrial strategy, he told the party's north-west regional council at Blackpool. Industrial regeneration required new public enterprises, greater investment, and expanded training schemes. "But none of these measures will work unless, first and foremost, we stop the flood of imports."

### Guarantees

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"Britain should take the lead in persuading the major industrial countries to develop a programme of concerted action to achieve greater convergence in their economic performance, as the Labour Government did successfully at the Bonn summit in 1978."

## Fees will raise house costs, builders warn

BY MICHAEL CASSELL

THE Government's proposals to charge fees for building inspections and the approval of plans will raise house prices and increase local authority bureaucracy, according to the House-Builders Federation.

Mr. Ronald King, president of the federation, calculated that the fees proposed in the current Building (Prescribed Fees) Regulation 1980 and presented to Parliament last week, could add £10 to the cost of a new £25,000 house and said they would discriminate against private house builders.

He suggested the system would mean more local authority monitoring staff.

The construction industry appears united in opposition to the Government's fees proposals and Mr. King's statement forms part of a campaign which is expected to gather momentum.

On Saturday, Mr. John Allen, president of the National Federation of Building Trades Employers, echoed the theme of increased bureaucracy when he predicted disputes between builders and authorities over the assessment of that part of the building works which attracted fees.

Some authorities, he said, were already preparing to hire more staff or engage consultants to check the validity of fees.

Mr. Allen told a federation meeting in Blackpool that while the industry accepted the need for policing of building regulations, the Government should bear the costs, as in the case of weights and measures activities and food and factory inspectors.

This proposal looks like being, in principle and in practice, a costly expedient. We want it issued, debated, urgently in Parliament and the introduction of the scheme delayed while the implications are thought through more carefully."

### Lewisham road plan approved

By Robin Pauley

A £12m SCHEME to improve roads and relieve traffic congestion in the London borough of Lewisham has been approved in principle by Greater London Council's south area planning committee.

Lewisham's problems are caused by two main roads meeting at the heart of its shopping centre. The plan provides for a by-pass and the conversion of part of the main shopping street into a pedestrian precinct.

The Government is known to be reviewing its offshore oil tax regime. But if there are to be any changes—and they could be announced in the Budget speech—the effect will be higher, rather than lower taxes.

THE NUMBER of vehicles designed and produced in Britain may fall from 1.07m last year to between 700,000 and 850,000 by 1985, say stockbrokers Phillips and Drew.

The 1985 level depends on the BL's recovery, and whether it can regain a 25 per cent share of the new car market.

Some decline in car production seems inevitable as export markets become closed to UK-built cars, the brokers say in their latest Motor Review.

Output will be hit as Vauxhall and Talbot UK replace British-built cars such as the Avenger and Chevette with cars

imported in kits.

Production of cars assembled from kits may rise from about 80,000 in 1979 (mainly the Cavalier and Alpine) to 325,000 by 1985. As well as the Talbot and Vauxhall change to this method, production of kit-assembled cars will be boosted by the BL Honda joint vehicle, the Bonty.

Phillips and Drew say the impact of these changes on the UK motor component industry depends on the nature of the product.

"Those manufacturers making components normally incorporated in major assemblies—

engines, transmissions—which are imported in kits used to assemble cars, will obviously be harder hit than those making parts which assemblers would be likely to buy in the UK."

Items in the last category include seats and interior trim.

"It seems apparent that groups like Lucas, Associated Engineering and Automotive Products fall into the former category, hence their push into Europe and other overseas areas," the brokers say.

### BP calls for oil tax cuts

BY RAY DAFTER, ENERGY EDITOR

BRITISH PETROLEUM, which last week reported after-tax profits of £1.65m for 1978, says the Government may have to cut tax levels to encourage oil and gas production in the North Sea.

The Government is known to be reviewing its offshore oil tax regime. But if there are to be any changes—and they could be announced in the Budget speech—the effect will be higher, rather than lower taxes.

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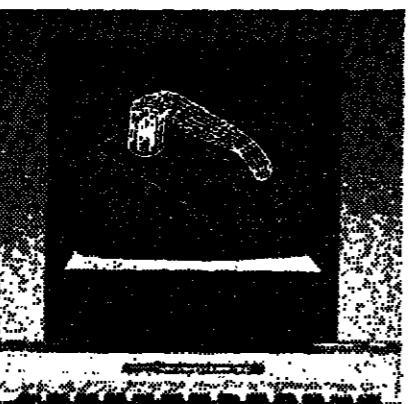
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## Import control strategy rejected by Healey

BY PETER RIDDELL, ECONOMICS CORRESPONDENT

## Airways in TriStar campaign

BRITISH AIRWAYS staff worldwide are being encouraged by management to "buy a TriStar" by beating their revenue targets for 1980-81.

The objective is to exceed the basic revenue target of £1.9bn in 1980-81 by 1 per cent, or £19m, enough to enable the airline to buy another Lockheed TriStar airliner.

The line has 17 TriStars delivered and 12 on order or option. The price is about £19m each.

• Philip Rawstone writes:

INCREASED CHARGES planned at the Scottish Highlands and Islands aerodromes run by the Civil Aviation Authority will not be as big as expected as a result of a Government subsidy of £2.5m a year for 1980-81.

Such short-term measures should be used as a framework for developing a successful industrial strategy, he told the party's north-west regional council at Blackpool. Industrial regeneration required new public enterprises, greater investment, and expanded training schemes. "But none of these measures will work unless, first and foremost, we stop the flood of imports."

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## SOMETIMES MDs FIND IT DIFFICULT TO LOOK AHEAD.

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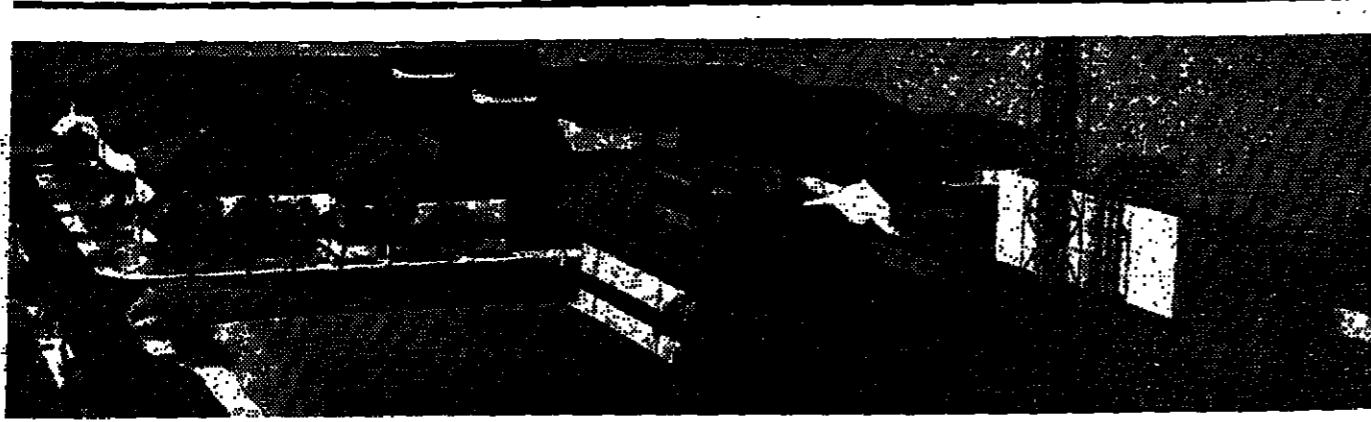
On the export finance side alone such things as documentary credits, discounting of bills, and foreign exchange and insurance can be made available.

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# Building and Civil Engineering



An £11m contract to build the first phase of a new district general hospital at Maidstone, Kent, has been awarded to John Mowlem by the South East Regional Health Authority. The development will be two miles west of the town centre

## Water for a desert city

WORK HAS started on site on the new £11.3m water supply scheme for the town of Hall in Saudi Arabia.

The scheme, which will take about two years to complete, is being carried out for the Ministry of Agriculture and Water, Riyadh and was designed

by Sir Frederick Snow (International). The main contractor is the Saeyoung Construction Company of South Korea.

The purpose of the scheme is to supplement the town's existing water supply with up to 20,000 cubic metres of water per day initially with the capability of future extensions of up to

## Refinery expands

CONSTRUCTION ENGINEERS

William Press and Son have been awarded combined contracts worth £1.5m by Pilmann Kellogg for pipe and vessel erection associated with the resin upgrading project at the Mobil Oil Refinery in Coryton, Essex.

The work involves the demolition of the rear of the building which is to be rebuilt and extended to provide additional accommodation. Thus all London-based Legion organisations will finally be housed in the same building.

An essential aspect of the scheme is the retention of the existing Pall Mall facade, behind which 33,000 sq ft (gross) of offices are to be created, together with a council chamber at basement level.

Reconstruction, now in progress, will take some 74 weeks to complete and the cost figure is thought to be around £1.5m.

At Pall Mall, Bovis face

several severe problems, including access limited to the rear of the site and the fact that the new Jubilee Line tunnel passes directly under the Legion's building.

Architect is Stanford Estwell and Associates of Stansted Mountfitchet, Essex; structural engineers, Mitchell McFarlane and Partners; quantity surveyor Gordon Harris and Barton and mechanical engineering consultants, Ellis Mechanical Services.

Transurb Consult is the Belgian engineering company which groups operating companies — Belgian Railways and

## Legion has HQ plans

ROYAL British Legion has appointed Bovis Construction to carry out a major re-construction at the Legion's headquarters building, 48/49 Pall Mall, London.

The work involves the demolition of the rear of the building which is to be rebuilt and extended to provide additional accommodation. Thus all London-based Legion organisations will finally be housed in the same building.

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## Sports in Scotland

AT BLANTYRE, Cubits (Scotland) is to build a £2.17m sports centre for Hamilton District Council.

Accommodation at the centre will include a 25-metre pool and training pool, a sports hall and ancillary hall, two squash courts, changing areas, sauna and solarium, cafeteria and bar lounge.

Designed with a steel frame and reinforced concrete floors, the elevations of the new building will be largely of brick. The contract includes provision of the car park and landscaping.

The sports centre has been designed by Hamilton DC director of architecture, E. D. W. Duncan, with Thorburn and Partners as structural consultants and Wallace, Whittle and Partners as consultant engineers for mechanical and electrical services.

On the Scottish coast at Saltcoats, the company (member of the Tarmac Group) will build an amusement centre with office accommodation above for B. Kemp Consolidated Leisure. Architect for the £225,000 project is John H. Brackston Associates.

## Mears wins Jersey job

WORK IN the upper harbour yacht marina in St Helier is to be carried out by Mears Contractors at a cost of £1.4m for the States of Jersey.

A low wall is to be built around the toe of the existing masonry wall of the upper harbour on the north, east and west sides. In some areas the wall will be of mass concrete placed on rock, but where the rock is low, sheet piles will be used.

On the south side of the upper harbour a blockwork wall windbreak with a top level of about 12.5 metres will be constructed while in the south wall of the yacht marina there is to be a concrete weir with two steel gates.

Mears will also be deepening the harbour by removing 60,000 cubic metres of material and in addition will position timber columns and mooring posts for the attachment of floating booms and pontoons. A sub-contractor will supply floating booms and pontoons, walkways, ramps, mooring devices and services.

## Benghazi contract

The development will consist of an opera rehearsal studio; a chorus room with tiered seating for 120 people, two ballet studios, new stage door and telephone system, 12 dressing rooms for opera principals, dressing rooms for 150 singers, and others; new wardrobes, changing rooms and showers—and administrative offices.

The

building

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designed

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Partnership

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Architect is Green, Lloyd and

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Modernisation of Wandswo

police station will cost £429,000.

Work will be completed within

10 months.

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## Renovations by Wates

AGAINST THE trend, Wates Special Works has won £24m worth of orders.

At Edith Grove, Cheltenham, 82 flats are to be modernised for the Guinness Trust, under a £1.5m contract. The 5-storey blocks will have new services throughout. Windows overlooking heavily trafficked roads will be double glazed. Flats will be insulated to reduce heat loss and further savings are to be achieved by recovering roofs in low density concrete with a high thermal resistance.

Architect is Green, Lloyd and Adams.

Modernisation of Wandswo

police station will cost £429,000.

Work will be completed within

10 months.

## IN BRIEF

• Fitch has a contract to redesign 25,000 sq ft of a shopping area at Shannon Airport for Aer Rianta as part of the redevelopment of the duty-free shopping area at Shannon.

• A major order for Granges Aluminium profiled cladding, worth over £100,000, has been placed with RZ Aluminium Fabrications of Hull, for the cladding of the six new buildings currently under construction which will together make up the assembly plant for the new De Lorean luxury sports car to be built in Belfast. More than 12,000 square metres of "Monoclad" with Granges TRP 40-100 grey Metalclad bonded to 30 mm polyisocyanurate insulation will have been used by the time the job is completed.

• Equipment for the continuous production of GRP translucent sheeting at six metres a minute has been sold by Laminated Profiles Development to Venezuela. The contract is with Deco-Glass Industrial Venezuela, and is worth over £100,000. It includes the supply of process technology, plant design, erection supervision and commissioning of a complete production unit at a site about 50 miles from Caracas.

## Belgian ideas for Algeria

TRANSURB Consult, Brussels, has obtained a contract from Algerian Railways for the complete engineering design of the rail service for the future industrial zone of M'sila.

The new railway line will be approximately 60 km long and will connect up with the existing Algiers-Constantine line. This contract is in addition to three other contracts in hand by Transurb Consult concerning the complete design of another railway link to the new industrial site at Djel, the study of the reorganisation of the rolling stock maintenance shops, and study of the reorganisation of the management computer system.

In partnership, Transurb Consult is also carrying out a reorganisation survey of Algerian Railways accountancy and finance systems.

Transurb Consult is the Belgian engineering company which groups operating companies — Belgian Railways and

reinforced concrete floors.

Work starts at once with completion for late 1981.

Architect is Renson Howard Wood Levin Partnership and the consulting engineer Ove Arup and Partners.

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structures such as the Ninian Central Platform to the flotilla that held up York Minster during its restoration, represent not only original design and application but immense diversity. We've probably left more engineering landmarks round the world than anyone since the Normans! Now, we look forward to putting up many more during the eighties.

PSC Freyssinet will be officially inaugurated at the Commonwealth Institute on March 19th.

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## MANAGEMENT

### Fiscal relief in business game

A SHINING example to the Chancellor of the Exchequer has just been set by the administrators of this year's UK national management championship, which began in January with an entry of 808 teams. The administrators, who play the role of Government in the computer-based contest, have rewarded the 202 teams which have won through to the second round with a 20 per cent cut in taxes.

This fiscal generosity, however, has been balanced by a worsening of the general economic conditions facing the surviving "paper" companies in their struggle for one of the 64 places in the third round, which starts in mid-April. Two further rounds will then reduce the entry to the four teams who will compete in London on July 22-24 for prizes of £2,000, £1,000, £750 and £500.

Players still in with a chance include the 1979 champion, Neil Tomlin of Rank Xerox, even though his company's initial entry of six teams has already been halved. Of companies which submitted a mass entry, ICI has the best record with ten teams still surviving out of the 18 who came to the starting line. But RHM Foods' three initial entries are all still in business.

The 606 teams which were knocked out in the opening round can retain a chance of financial reward by entering the subsidiary "Plate" competition organised by the National Management Game's sponsors—the Financial Times, ICI, and the Institute of Chartered Accountants in England and Wales, in conjunction with the CBI and the Institute of Directors.

The Plate, which will also be decided in July, carries prizes of £750, £500, and £250 for the three teams who direct their "paper" consumer-durable businesses into the final. Entry lists for the subsidiary contest will be kept open by the administrator, Geoff Trewhinard (NMG Victoria House, Southampton Row, London WC1B 4FJ-Te), 01-322 7806 until tomorrow, March 18.

Michael Dixon

Brian Houlden and Terry Hill argue that the Finniston Report overlooks the need for management acumen

A FEW years ago one of the top executives of a major multinational corporation moved from the position of financial controller of its substantial European activities to that of technical director. He was originally trained as an engineer.

His job change, and his earlier career path, exemplifies the sort of contribution by engineers to industry which the Finniston Report wishes to promote. It illustrates one form of the flexibility of engineers across the "engineering dimension."

The executive had originally graduated as an engineer, but his course included some management topics. He followed this with three years as an engineering officer in the defence forces, attended a one-year business school course in North America, and for three years worked with a leading international consultancy specialising in company structure and strategic issues. He then joined the finance function of this multinational. Over the next few years his performance was such that, even though he was not a qualified accountant, he was promoted, at a relatively young age, to the post of financial controller.

His example illustrates some general points. Most senior executives, whatever their prime function, have to have as much, if not more, understanding of business and management as of

their specialism. Engineers, in order to make a full corporate contribution, are no exception. In this case, the executive achieved this mix and earned his standing in the company, by a combination of formal education and experience blended together over a period of several years.

But it is not only engineers in senior management who need an understanding of business and some management ability. Both those in mid-career and new graduates in junior posts will operate less effectively if their educational foundations exclude management subjects.

Yet the recommendations of the Finniston Report give scant attention to these management aspects of the education of engineers.

The report explains clearly the link between the success of the manufacturing sector and our future standard of living. It also shows how in recent years much of the UK manufacturing sector has been losing out to foreign competition because it has failed to make technological advances in its products and production processes. This has led to a loss of markets, low productivity, falling profit margins and shortages of resources for investment in new products and equipment. These falls are clearly demonstrated in the television, motorcycle and machine tool industries as well as in many others.

#### BOOK REVIEW

### Guessing the odds for the future

Whether the book is worth £85 or amounts to a "strategic planning guide for businesses in the 1980s" is a different matter.

However, for all its absurdities, the book is not entirely without merit or interest. It raises the important question of what type of guide to possible future developments is likely to be useful to the corporate planner or executive, and which is not. Strategic planning is enjoying something of a vogue at present, as the recent article on this page on Shell pointed out. There is obviously a legitimate role for a discussion of the range of possible influences on business decisions—including

not only potential economic developments but also political factors, such as legislation and the stability of particular countries.

Indeed, the most interesting section of the new book are those discussing the prospects for various industrial sectors. Reflecting on his own background as an economic forecaster working closely with industry, Mr. Morrell identifies a number of new industries for the 1980s, many of which will be concerned with the development of information systems and new sources of energy and raw material. There is, however, an obvious danger in trying to pick "winners" as tech-

nological changes are never quite as sweeping as the enthusiasts predict.

Such strategic planning exercises can help in provoking thought about the impact of both of technological change and of political and economic uncertainty. But this book goes into an area where there is much less scope for useful discussion.

It is full of assertions which either rest on tenuous foundations or have no meaning as statements. For example, Mr. Morrell concludes that union power has reached its peak and the social forces at work in Britain today point towards the

reduction in size of work units and the steady erosion of the influence of unions." Or not as the case may be.

It is not clear what any manager is supposed to make of the suggestion that there will be further progress towards female equality. In itself this means nothing. The vacuity of such comments is only matched by the estimate that there is only a 2 per cent chance of a world war but a 50 per cent chance of a non-nuclear war on the scale of Korea or Vietnam somewhere in the world. Such speculation is of no practical value whatsoever to any manager apart from the tiniest of fashions.

A new BSc programme in

Manufacturing Studies at North East London Polytechnic was designed in close collaboration with staff of the UK operations of one of the world's leading volume car manufacturers. Slightly over half of the total programme is devoted to management rather than technical engineering subjects.

Similarly, paths can be traced for graduate engineers wishing to pursue the early part of their careers in marketing, personnel, purchasing and finance— their technical engineering training needs to be matched with a substantial training in management subjects specially chosen to relate to their career choices.

#### Dimension

The early part of the Finniston Report fails to focus on this broader mission, but it does not then match these "needs" with its recommendations. If the latter are implemented, the quality of school leavers studying engineering is likely to improve. As a result we will get better engineers in the technical sense. But this is not enough to secure the required impact of engineering across the whole "engineering dimension."

Engineering in the technical sense is largely scientific, in that problems can be described fairly precisely and quantification is relatively easy. On the

other hand business and management are concerned as much with art as science. Problems are dynamic and difficult to describe or quantify; they embrace human behaviour and financial resources, as well as technology. The mind of the engineer must be brought to understand and cope with these intangibles much earlier than at present. Otherwise his thinking becomes set in its ways, and career opportunities across the "engineering dimension" become closed to many.

Much serious thought needs to be given both by industry and those in schools of engineering and schools of business, about how to develop integrated flexible programmes. Such courses would have to offer enough optional subjects to allow different students wishing to pursue engineering careers, to choose the appropriate balance of engineering and management subjects.

This is a challenge that the Finniston Report fails adequately to expose. If it is not answered correctly, the better future for the people of the UK, at which the report aims, will not be achieved.

Brian Houlden is the Institute of Directors' Professor of Business Studies, and Terry Hill, the Senior Lecturer in Production/Operations Management, in the School of Industrial and Business Studies at the University of Warwick.

There is a proper role for the discussion of possible social and economic developments—though it should not be termed forecasting. Mr. Morrell should have confined his to those areas of the economy and the industrial structure which he knows well and about which he writes plausibly, if somewhat ponderously, in this book.

Yet there is still something slightly sad about the growth of this type of strategy planning. The desire for forward projections and "scenarios" is in part a reflection of the decline of the entrepreneurial spirit and an associated desire to support any decision with the maximum amount of analysis, however specious. A recognition that the world is uncertain and that flexibility is required is worth more than a whole library of "scenarios."

*Britain through the 1980s* by James Morrell, Gower, £65.

## Technical Page

EDITED BY ARTHUR BENNETT AND TED SCHOETERS

#### CONSTRUCTION

### Quieter way to break new ground

WORKMEN AND public alike have not been enamoured with the offensive noise and discomforting vibration emanating from conventional pneumatic drills. Now, some of the suffering may stop with the introduction of a new road breaker, all British in design and manufacture, promising to be easier on Anglo-Saxon ears.

Called Zitec 20, it is the first product to emerge from a radical new approach to construction tool design by Compair Construction and Mining Tools Division, Camberwell, Cornwall, (0208 712750).

The company's latest concept—which they call Zitecology—aims to take advantage of the most up-to-date manufacturing methods and materials to achieve designs that lighten the health and safety burden on operators by fabricating machines which can be used for long periods without causing unnecessary fatigue.

According to skilled interviews conducted on building sites by the company, men who have used conventional road breakers for most of their lives in the construction industry report that the Zitec 20's performance is unrivalled.

This looks and even feels like an ordinary deafening, bone-rattling breaker until it is switched on... then the differences are manifested in operator comfort and the amount of time he can spend using this tool against the exhausting exercise necessary with tools which do not boast the Compair product's advantages.

It begins with, it weighs only 20 kg yet will tackle any job previously requiring larger

pneumatic tools. The usual heavy forgings have been replaced with simple steel and/or cast iron components allied with tough plastics, and extensive rationalisation has reduced the number of components by 50 per cent. Result is a streamlined, balanced breaker which is easy to handle and promises to set new standards in industry.

Trim it may be, but not at the expense of toughness. The plastics chosen for this model allow it to stand up to the roughest site conditions and are self-healing if accidentally pierced.

Traditionally the guts of the breaker, the cylinder, has been an integral part of the heavy steel forging which forms the main body, but with the new machine that casting has been replaced by a steel tube, bored, faced and drilled on a single machine. Cylinder is bonded inside a polyurethane sleeve which slots into the outer casting of the breaker which is also made of the same tough material.

Embedding the cylinder in plastic results in the suppression of vibration and deadening of noise. The design has also enabled a long exhaust passage to be incorporated between the cylinder sleeve and outer case—cutting down noise from explosive discharge of exhausted air.

The result is low noise level—84 dB at seven metres and 92 dB at one metre.

Maintenance is simpler because there are only 28 components in the machine which can be easily serviced on site (one spanner only is used for dismantling) and even the piston can be changed in well under half an hour.

DEBORAH PICKERING

#### SAFETY & SECURITY

### Explosion-proof drums

DRUMS designed to protect petroleum spirits, solvents and other low flash-point liquids from explosion, have been designed by Fire-Reliant, of Southport, UK.

In 25, 50 and 200-litre sizes, they are each filled with Explosifol, an expanded aluminium alloy mesh, which protects the contents from many explosive hazards, including impact, external heat, flashback, auto and electrostatic ignition and drum penetration by anything from a hot splinter to an incendiary bullet.

Although it completely "fills" each drum, Explosifol takes up less than 1 per cent of the volume, weighs only about four ounces per gallon space and retains no more than 2 per cent of the liquid content. It will function efficiently right up to its melting point of 1,200 degrees Fahrenheit.

Fire-Reliant drums are constructed to BS 814 1974, a significantly higher standard than that adopted for the majority of industrial drums.

The surface finish involves four coated coatings, the final coat being an easily identifiable yellow.

Each drum is labelled "Explosion Protected" and drums can be supplied with approved labels covering the requirements of the Highly Flammable Liquids Regulations or the Petroleum Conservation Act.

Fire-Reliant, 106a, Upper Aughton Road, Southport, Merseyside, PR8 5NJ. 0704 64617.

Information is created on Wang workstations as well as data interchanging, sharing of peripheral equipment is also feasible, cutting costs.

Using channeling through a node, WISE (Wang Office Information System) brings separate integrated office clusters together to form a whole.

Then, separate staffs can easily perform a number of inter-system functions such as document access and transfer, word processing and communications, welding all of a company's functions together with workstations and e-mail.

For some time Wang has offered its integrated information systems in which at one

time, the officer can also zoom in on the trouble and make a video recording.

In addition, satellite cameras can be connected and the use of motion detection in the video processing will turn the recorder on only if an intruder is moving about. Such cameras can be placed in remote but sensitive parts of, say, the inside of the building.

The officer can also zoom in on the trouble and make a video recording.

The system says that in one trial installation, intruders were recorded comprehensively for four hours and arrested the following morning.

### Meter for danger zones

IMPORTANT where engineers are required to work in flammable atmospheres is the development by John Davis and Son (Derby), member of the Doulton Group, of an intrinsically safe digital multimeter.

This is a conventional unit that can be used with confidence in potentially explosive atmospheres in mines and petrochemical plants.

DEBORAH PICKERING

able, the instrument weighs only 2 kilos. Its resolution is to 1 millivolt or 1 microamp on the most sensitive dc ranges. It provides ac and resistance ranges, plug diode check and indication of over-range inputs.

The unit will permit conventional installation and maintenance procedures in areas where they hitherto would have been prohibited.

John Davis, Alfreton Road, Derby DE2 4AB (0332 41671).

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## THE ARTS

Theatre Royal, Haymarket

## Reflections

The story of Madame du Barry and George Greive, the Northumbrian revolutionary, who descended upon her from this odious little man. If only appearances could breathe life into a play made from history all would be well. But this is not Mme. Tussauds and some-thing must be given life. They must engage with each other and start to behave unpredictably.

This is what Mr. Peacock has the greatest difficulty in making them do. Eventually he suggests that Greive and du Barry are reflections of each other on opposite sides. Both are upstarts; both are ambitious; both want power and both value possessions. The mirrors and the chandelier are replaced; the room restored to its pristine glory when it was the love-chamber of a monarch. And Greive whom we guessed is physically covetous of du Barry prepares to re-enact the royal role.

The scene of candle-lit assignation between them is performed impeccably by these two principals who coax and then grapple with each other but somehow it never entirely loses its waxwork flavour and there is nothing much that the director Keith Hack can do to vivify it. In the same stilted style, the treachery of the black boy Zamor (Jeffery Kisson) who sides with the citizens and signs the petitions denouncing the revolutionaries has less impact than it might.

Still, it is a change for us to see a costume play on the West End stage in which a period is taken at its face value. If wit and bite are rather sparse there are nonetheless some rewards for the eye.

ANTHONY CURTIS



Roger Taylor

Wigmore Hall

## Academy Octet

The Academy of St. Martin-in-the-Fields Octet was created in an attempt to recapture "something of the sensibility" of the Academy's earliest concerts in 1959, when the group consisted of a dozen players and its repertoire was exclusively baroque. But now the Octet is moving into chamber music as well. On Saturday evening at the Wigmore Hall it demonstrated the rewards of tackling sextets and octets as a scaling down of a larger ensemble, rather than an ad hoc expansion of an established string quartet.

To view the Academy Octet entirely as its parent orchestra with small would be a mistake. For this concert it was led by Hugh McGuire, highly experienced in quartet playing, yet here less self-conscious than

when he was leader of the Allegri Quartet, with collective responsibility weighing more heavily. The opening of the Brahms Sextet in G major, indeed, was almost too impersonal, the tempo at the slowest limit of Allegro non troppo, the first violin's melody objectively poised and elongated of tone. A more robust second subject from the first cello restored equilibrium and set the movement on a course of greater involvement, in which textures remained always lucid—partly

thanks to Brahms's skill, but also to intelligent, unselfish performance. A scherzo, too, of extreme lability, paid dividends, but the Poco Adagio really needed more personality, more flesh on the bones of the variations. The finale displayed

the ability of the Octet most forcefully, its experience in fusing the most precise high-speed bowing with effortlessly comprehensible expression.

The Mendelssohn Octet is similarly an ideal vehicle for these players. Chamber sonatas were here abandoned for block orchestration and strenuous attention to dynamics.

Again the opening was tentative, suspicious of the flood of invention, unwilling to yield to its spontaneity. That soon passed, however, and some moments of uncertain balance in the Andante aside, the rest of the work was confidently expansive, rough-hewn textures juxtaposed with the lightest, most casually exact articulation.

ANDREW CLEMENTS

RUGBY UNION BY PETER ROBBINS

## A great day for England and rugby

AFTER AN improbable start to the season in matches against the Argentine and New Zealand, England, by beating Scotland 30-18, have simultaneously carried off the greatest prizes in rugby: the Calcutta Cup, the Triple Crown, the championship, and of course the Grand Slam.

If the major share of the accolade goes to the players for the dedication to what seemed a hopeless task in November, one must never overlook the part played by the coach Mike Davis and the selectors. Davis prepared his squad beautifully for each game and widened the horizons of the team and the individuals. Scotland's coach, Nairn McEwan, also commands admiration for the job he has done for his country.

Not since 1957 have England had such success and the spirit of the game also brought back memories. What a joy to see two sides using skill and intelligence to win rather than just the bludgeon of physical bulk. It was a great day not just for England or Scotland but for the game and its traditions.

On Saturday, England produced a revealingly expansive game when they needed to. Scotland, to their eternal credit, responded with some

dazzling approach work which unfortunately was limited in its finishing pace or polish.

It was in fact a game of two distinct halves and fortunately England had 19 points in the bank at half time. The valuable lead was earned yet again by the machine-like performance of the pack. Essentially the game was won by England's marvellous front five, but this is not to decry the efforts of the back row. The sight of the Scottish scrum on the retreat was a great tonic to England's backs.

The Scottish second row, I felt, had the better of things in the line-out, except in the vital secondary possession, where Beaumont, Cotton and Utley moved more quickly onto the ball. That was a vital bonus. The scrum superiority spilled over into the mauls and rucks in the first half, and Horne's accurate kicking pushed England forward ruthlessly.

Scotland indicated their own aspirations with a sharp counter-attack from Rutherford but, deprived of possession, they did not have anything like the choices that England enjoyed in the first half. Those choices gave Woodward the chance to demonstrate his pace and subtlety.

Scotland had to cave in before such clinical pressure, but such pressure was possible only because of the good distribution of the hard-won possession, and also because Hare gave the rest of the team great confidence by his superb fielding.

England led by 16 points at half-time and were apparently running away with things, but Irvine kicked a second penalty goal to revive Scottish hopes. It was then that the whole significance of the England performance was encapsulated in a series of four unsuccessful rucks before Smith scored.

Scotland had got back to 12-23 when England had the

piece of luck all confident sides welcome. Hare kicked a penalty, and then Carleton gathered a helpful bounce from Dodge. This made it 12-30 to England, and they were only too glad to hear the whistle go because Scotland were flinging everything at them.

Scotland's revival was possible because Gray and Tomes steadily won more line-out balls and there was a significant increase in the rucked possession, which Leslie and Beattie set up. Beattie once again showed some moments of brilliance and the very highest

promise for one so young. The Scottish surge up front was sternly contested by England and Laird and Rutherford, more liberated at half back, ran from everywhere.

Yet it was Irvine, so dismal against the Welsh, who was the real *deus ex machina*, along with Renwick and Johnston. Tomes's try actually went through 14 pairs of hands, and that figure does not in any way account for the skill, speed and daring which went into it.

Scotland can indeed be proud of the way they played and they were finally thwarted not just by the 12 points but by some outstanding defence from Dodge and Woodward in the centre and Utley and Neary round the fringes. Neary set a new record for England's players with his 43rd appearance.

It was fitting for him to come off the field after so many years of disappointment with these prizes. Now the senior pros of this England side can retire content with being part of English rugby history. The young can look forward to further honours and look back with gratitude to the senior members. As for Scotland, it cannot possibly be long before their young lions earn the fruits of their labours.

The City University, EC1

## Music at TCU

by DOMINIC GILL

The City University in St John Street offers a music degree course of unusually broad base: not the traditional B.Mus., but a B.Sc.Mus. embracing a wide range of musical studies from acoustics, aesthetics, ethnomusicology and the psychology of music to general music theory and, especially, performance—this last emphasised by close links with the Guildhall School. This broad outlook helps to make TCU's one of the liveliest, in spite of being also one of the smallest and newest, music faculties in the country: the closest parallel is perhaps with York in its early days—York graduates indeed number significantly among the teaching staff.

TCU also offers as one of its most important facilities an electro-acoustic music studio which is still expanding, shacked only (like music departments everywhere, except perhaps that of the Ministry of Defence) by lack of funds. But even financially, TCU have been luckier than some. Their studio is about to move into newly-converted premises in the basement of the university's Centre for Arts; and work there in the field of "electro-acoustics" in the widest sense, from high-quality recording pure and simple to research into electronics and computer controls, will rely in its line of development less on vastly expensive and elaborate hardware systems (like IRCAM's in Paris) than on smaller, more flexible and much cheaper systems of microprocessor control.

From the start, one or another aspect of the studio has played a fundamental role in the music course's curriculum; and on Wednesday and Thursday last week, TCU offered some of the recent work of its composers and performers in three public programmes entitled "Electro-Acoustics in Concert." It was an event of substantial achievement, as well as firm promise: programmes unfolded without technical hitch; each bore the mark of careful and imaginative planning, standards generally, both of performance

and composition, were remarkably high.

What in justice calls for the space of three reviews must be condensed into one. Three pieces of pure tape-music all made strong impression, and two of those especially, by the postgraduate student Alejandro Vinao, for their variety of gesture and richness of colouring. *Danza para el folklore imaginario* embellished a dark, unrelenting ostinato tread with a tracery of melody and texture, elaborately manipulated among four loudspeakers. Longer and still more elaborate, was Vinao's *Una Orquesta Imaginaria*, dense enough in its movement, and in its exuberant orchestral conception, to demand many more hearings, but powerful enough all the same at first meeting to justify the prize it received at the Bourges Festival two years ago. Jonty Harrison's *Pair/One* was a shade more pedagogic in manner (can any piece of music really examine a relationship?), but persuasive in its dramatic shaping, pleasing for its clarity of idea and economy of working.

The only substantial disappointment of the three programmes was not, as it turned out, a contribution from the university at all. Three short pieces offered by the Canadian horn-player James MacDonald for amplified horn and tape were unspecial, unsurprising—and the best of them, a *Fantasia for horns* by Hildegarde Westermamp, I suspect would have had stronger impact left in its original form for tape alone.

*Van Horn Boogie* by Steve Ingram had no horn in it at all: a good humoured, jazzy essay for amplified piano and tape, stylishly delivered by Mark Lockett—though this was the first piece I can remember in a long time whose performance is actually upstaged by the composer's own programme note. Mr. Lockett also played, with fine conviction and no little bravura, the 30-minute piano piece *Phrygian Gates* by the Californian composer John Adams. *Phrygian Gates* is essentially a sort of sweet-toothed

systems music which stands in the same relation to Steve Reich's *Drumming* as, for example, Mike Oldfield's *Tubular Bells*. Adams has declared, "In America we are tired of theory; we are trying to rediscover 'magic.' Apart from the basic misapprehension that the two are incompatible, why is it that the search for magic, from Messiaen to Stockhausen to Pink Floyd, so often leads no farther than the triumphant rediscovery of kitsch?"

A major contribution to the first and last concerts was made by TCU's resident vocal group Vocem, singing music for solo voices amplified (or otherwise electronically treated). The last three minutes or so of Simon Emmerson's *Opheleia's Dream* were the most enchanting: a dense curtain of electronic reverberation built up from an assortment of phonemes. The digital echo for Kevin Jones' *Terz Terrors* (a bad pun on "textures") seemed either red to be working very well, or in any case not to add a great deal to the effect—I was surprised to learn that the piece had been originally conceived with larger forces in mind.

Where the murmur die, a new piece by Alan Belk, was an unashamedly Beirio-inspired essay admirably accomplished in construction, and well presented; but more original, and far more gripping, was Mr. Belk's own account of Roger March's *Dawn*—a splendid, zany monologue delivered with superb confidence and just the right pinch of hard dramatic sense. That was a memorable high point; but the highest, and aptly also the finale, was Vocem's performance of Beirio's *A-Ronne*—that supercharged polyphonic *Sequenza* for eight amplified voices first given in London by Swingle II four years ago. Once or twice Vocem's lack of a perfectly polished Swingle-technique let them down; but never rudely, and they caught all the vital elements of the music, its humour, pathos and sensuousness, and its sexiness too, with marvellous vigour.

The ballet's progress is a contemplation of lost hopes, lost joys, lost selves. And as so often with MacMillan, the evocation of the past—*Anastasia: La fin du jour*—is a matter of fixing feeling and attitude rather than of a superficial naturalism. The choreography uses a large cast, but is centred upon a trio—Jennifer Penney, Wayne Eagling, Julian Hosking—and a quartet in which Anthony Dowson, Ross MacGibbon and Ashley Page support Wendy Ellis. There is no identification of relationships, though *Testament of Youth* may suggest certain parallels, and the true importance of the ballet lies in the thrillingly inventive, rich and entirely apt movement that theme and score have inspired in MacMillan.

Covent Garden

## Gloria by CLEMENT CRISP

Death and the after-life has been an inspiration for Kenneth MacMillan's choreography since the early *Journey* which he made for American Ballet Theatre over 20 years ago. Two major works of his maturity *Das Lied von der Erde* and *Requiem*, have shown how potent is the response which this theme excites in his choreography. Now, in a setting of the *Poulenc: Gloria* which matches both the gravity and the happier aspirations of his score, suggesting that his ghosts survey what was, and what might have been, with some dispassion. If there is the bitterness of regret and accusation, it is most clearly felt in the writing for Eagling, to whom falls the final section

of the ballet when his companions have returned to their rest-like troops going over pectoral into action—and he makes a last tearing circuit of the stage before plummeting backwards out of sight.

Performances are magnificent. Penney, Eagling, Hosking, Wendy Ellis and her companions find the *miserere nobis* of the soprano solo *Domine Deus* there is a duet for Penney and Hosking of gentle, trusting affection; the succeeding *Domine Fili: unigenite, musically joyous*, is no less so in the writing for Wendy Ellis and her companions.

About this notable acquisition to the repertory, and the admirably re-dressed and revised—though under-danced—*Four Seasons*, more after a later performance.

The immediate pretext for the work is that lost generation who felt the full brunt of the First World War. As preface note MacMillan quotes a poem by Vera Brittain from *Testament of Youth*. The crucial lines which help fix the mood of *Gloria* run: "But in that song we heard no warning chime, nor visualised in hours benign and sweet/The threatening woe that our adventurous feet/Would starkly meet."

The fine setting by Andy Klunder, recently graduated from the Slade School—is a skeletal metal frame placed on a rising slope of ground. The cast appear, breasting this slope. They are revenants, the girls ghost-grey, the men in flight, that seem rotted, vestigial uniforms, and wearing tin hats.

The ballet's progress is a contemplation of lost hopes, lost joys, lost selves. And as so often with MacMillan, the evocation of the past—*Anastasia: La fin du jour*—is a matter of fixing feeling and attitude rather than of a superficial naturalism. The choreography uses a large cast, but is centred upon a trio—Jennifer Penney, Wayne Eagling, Julian Hosking—and a quartet in which Anthony Dowson, Ross MacGibbon and Ashley Page support Wendy Ellis. There is no identification of relationships, though *Testament of Youth* may suggest certain parallels, and the true importance of the ballet lies in the thrillingly inventive, rich and entirely apt movement that theme and score have inspired in MacMillan.

Leonard Burt

Julian Hosking, Jennifer Penney and Wayne Eagling in "Gloria"

Goldsmiths' Hall

## Kennedy/Demenga

by ANDREW CLEMENTS

Duos and solos for violin and cello seem austere fare for the opulent surroundings of the Goldsmiths' Hall. But Nigel Kennedy and Thomas Demenga make a well-balanced young team, both of them fluent technicians of clear, muscular tone, and respectful, considered interpreters. They began their recital for the City Music Society on Thursday evening with Ravel's singular essay in austerity, the *Sonata for violin and cello of 1922*—Ravel at his most laconic and to my ears at least, most credible.

Kennedy and Demenga did not go out of their collective way to avoid dryness—the outer movements were confined as severe, intellectual exercises, their tricks, rhythmic ambiguities and optional effects scrupulously rendered—and valuable self-deprecating moments of wit were as a rule overlooked. The throwaway ending of the *Trois* was simply that—thrown away—and only the *Lent* emerged whole. A performance in the making still, perhaps, already wonderfully precise but not yet ripe and flexible.

Kodaly's *Duo* poses fewer problems of an intuitive kind and demands a more conventional bravura. Kennedy and Demenga played it quite superbly: difficult to imagine a better version by non-Hungarian performers, unless it be by an equally accomplished duo of greater richness and warmth, more willing to experiment with nuance. Emotions were held on the tightest of reins throughout: unexpected frissons were confined to awe at the accuracy of Mr. Kennedy's high E-string playing.

Between the duos each musician contributed a substantial Bach solo. Mr. Demenga

selected the third cello suite superbly: difficult to imagine a better version by non-Hungarian violinists. The former was the more interesting, perhaps because less perfect: clearly thought through, yet sacrificing articulation for fleetness in the *Courante* and lured into unworthy indulgence by the panoply of the *Bourées*. Mr. Kennedy played his sonata superbly: difficult to imagine a better version by non-Hungarian violinists. The former was the more interesting, perhaps because less perfect: clearly thought through, yet sacrificing articulation for fleetness in the *Courante* and lured into unworthy indulgence by the panoply of the *Bourées*. Mr. Kennedy played his sonata superbly: difficult to imagine a better version by non-Hungarian violinists. The former was the more interesting, perhaps because less perfect: clearly thought through, yet sacrificing articulation for fleetness in the *Courante* and lured into unworthy indulgence by the panoply of the *Bourées*. Mr. Kennedy played his sonata superbly: difficult to imagine a better version by non-Hungarian violinists. The former was the more interesting, perhaps because less perfect: clearly thought through, yet sacrificing articulation for fleetness in the *Courante* and lured into unworthy indulgence by the panoply of the *Bourées*. Mr. Kennedy played his sonata superbly: difficult to imagine a better version by non-Hungarian violinists. The former was the more interesting, perhaps because less perfect: clearly thought through, yet sacrificing articulation for fleetness in the *Courante* and lured into unworthy indulgence by the panoply of the *Bourées*. Mr. Kennedy played his sonata superbly: difficult to imagine a better version by non-Hungarian violinists. The former was the more interesting, perhaps because less perfect: clearly thought through, yet sacrificing articulation for fleetness in the *Courante* and lured into unworthy indulgence by the panoply of the *Bourées*. Mr. Kennedy played his sonata superbly: difficult to imagine a better version by non-Hungarian violinists. The former was the more interesting, perhaps because less perfect: clearly thought through, yet sacrificing articulation for fleetness in the *Courante* and lured into unworthy indulgence by the panoply of the *Bourées*. Mr. Kennedy played his sonata superbly: difficult to imagine a better version by non-Hungarian violinists. The former was the more interesting, perhaps because less perfect: clearly thought through, yet sacrificing articulation for fleetness in the *Courante* and lured into unworthy indulgence by the panoply of the *Bourées*. Mr. Kennedy played his sonata superbly: difficult to imagine a better version by non-Hungarian violinists. The former was the more interesting, perhaps because less perfect: clearly thought through, yet sacrificing articulation for fleetness in the *Courante* and lured into unworthy indulgence by the panoply of the *Bourées*. Mr. Kennedy played his sonata superbly: difficult to imagine a better version by non-Hungarian violinists. The former was the more interesting, perhaps because less perfect: clearly thought through, yet sacrificing articulation for fleetness in the *Courante* and lured into unworthy indulgence by the panoply of the *Bourées*. Mr. Kennedy played his sonata superbly: difficult to imagine a better version by non-Hungarian violinists. The former was the more interesting, perhaps because less perfect: clearly thought through, yet sacrificing articulation for fleetness in the *Courante* and lured into unworthy indulgence by the panoply of the *Bourées*. Mr. Kennedy played his sonata superbly: difficult to imagine a better version by non-Hungarian violinists. The former was the more interesting, perhaps because less perfect: clearly thought through, yet sacrificing articulation for fleetness in the *Courante* and lured into unworthy indulgence by the panoply of the *Bourées*. Mr. Kennedy played his sonata superbly: difficult to imagine a better version by non-Hungarian violinists. The former was the more interesting, perhaps because less perfect: clearly thought through, yet sacrificing articulation for fleetness in the *Courante* and lured into unworthy indulgence by the panoply of the *Bourées*. Mr. Kennedy played his sonata superbly: difficult to imagine a better version

## FINANCIAL TIMES

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Monday March 17 1980

# A determined Mr. Carter

THE CENTRAL message of President Carter's latest financial package is clear and important. The President has decided, against the conventional wisdom of both politics and of Wall Street, that a determined assault on inflation is not an overriding electoral necessity, as well as a clear national priority. He has deliberately chosen a number of measures generally considered to be vote-losers. Budget cuts, the tax on petrol, restrictions on consumer credit — to drive this message home. Technically, the measures are rather less radical than some earlier packages, and official forecasts of the likely result are so tentative as to be invisible, but the message remains clear: the President will go on trying till he gets results.

## Fine tuning

There has naturally been some scepticism in the first reaction to the measures themselves. There have been too many faulty forecasts, to allow general confidence that just this, and no more, is what is required. The fiscal proposals are aimed at a balanced Federal Budget, a figure of some symbolic importance, and the fulfilment of a 1976 election pledge. However, a balanced in the U.S. Federal Budget is not by any means the stern stance which the same term would imply, say, in the UK. The proliferation of off-Budget agencies, the large share of welfare spending carried by local budgets, and the fact that nearly all public utilities are privately financed, mean that the Federal fiscal balance is of secondary importance. Certainly the \$15bn cuts proposed are the finest of fine tuning when measured against the size of the U.S. economy.

The monetary measures are also open to the comment that there is rather less in them than meets the eye. In some respects they mark an important extension of credit control, notably in the reserve requirements now imposed on large banks which are not members of the Federal Reserve system and on such new intermediaries as the money market mutual funds. On the other hand there are extensive loopholes in the new restraints, to spare such already depressed sectors as housing and the motor industry.

Equally, the Fed has done everything possible to avoid

## Imposing strain

However, domestic results have been evident and, indeed, the Fed had strong reasons for treading delicately in its latest measures. The collapse of the bond market — a normal and unhappy result of inflation psychology — is a structural change of fundamental importance. The corporate sector will be more dependent than in the past on bank finance. A regime of high interest rates is also imposing strain on financial institutions. All this will help to induce caution and policy must sin for restraint, not collapse.

In our judgment, then, the measures will prove adequate, though figures for loan demand and money growth may tell a different story for some time yet. The markets should not be ruled by one set of statistics. The U.S. economy has had a few weeks to get used to a strong dollar. It must now begin to count also on a determined President.

# The threat to Europe

THE BEHAVIOUR of the French Government over the British demand for a substantial reform of the European Community's budgetary system is becoming more and more extraordinary, and more and more dangerous. Until recently, it seemed to be employing the classic foot-dragging tactics familiar from many previous negotiations, in order to minimise the concessions which might have to be offered at the end of the day. Since last week's Cabinet meeting, however, it almost looks as if the French Government is deliberately attempting to escalate the conflict with Britain, and thus risk turning what should be an important house-keeping issue into a major political battle.

## Political row

This could be extremely dangerous for two reasons. In the first place it could be very unwise for the French Government to underestimate the lengths to which the British Government might be provoked to ensure that the budgetary question is taken seriously and dealt with equitably. In the second place, the European Community, and the Western world in general, cannot afford, in the wake of the troubles in Iran and the Soviet invasion of Afghanistan, a serious political row between Britain and France.

It must be admitted that the British Government has not handled its side of the negotiations with much subtlety or imagination. By insisting that the budget be treated in isolation, rather than in a larger package of issues, it has played into the hands of those in France who are reluctant to make any concession. But when the French Cabinet issues an explicit threat that it may not even agree to discuss the budgetary issue at the next European summit, the stage is clearly being set for a major confrontation.

Ostensibly, this threat would only be operative if the Commission fails to put forward a formal proposal in good time, but this condition does nothing to hide the harshness of the threat. If the French Government is prepared to say out loud that it may not even dis-

# A President in unmapped territory

By JUREK MARTIN in Washington and STEWART FLEMING in New York

THE new vogue word in Washington is "candid." In foreign policy, it is candid for the President of the United States to admit a mistake in voting against Israel in the United Nations. In economics, it is candid to acknowledge publicly that the Federal Budget, with all its attendant economic projections — which was prompted, with such fanfare, at the end of January as being lean, tight and austere and appropriate to meet the challenges facing the nation — has become, six weeks later, nothing of the sort.

It is candid, too, the argument runs, for a sitting president to have the nerve to introduce the sort of measures Mr. Carter has done in the thick of an election year, thus running the risk of alienating precisely those constituencies whose support he must court.

In reality, the political risks may be overstated since it appears, unless lightning strikes that nothing Senator Kennedy says or does is going to win the Democratic Party's nomination, while the Republicans seem intent on providing an alternative to Mr. Carter in the person of Mr. Ronald Reagan, who could be unelectable in November.

It is not at all surprising that some of the most striking initial effects of U.S. credit restraint should have been seen in international markets.

## Single digit forecast

All that Mr. Charles Schultz, chairman of the Council of Economic Advisers, would say over the weekend was that he now thought the long-awaited recession would be "smaller and later" — with the economy contracting in real terms from the fourth quarter of last year to the final quarter of this by about 0.5 per cent, not 1 per cent, and with inflation being a percentage point or more higher than it would otherwise have been, at a little under 12 per cent on the Consumer Price Index. President Carter confidently predicted that by next year inflation could be down to the "high single digit level" — but the chairman of the Federal Reserve Board, Mr. Paul Volcker, appeared sceptical about even this through the perennial haze of his cigar.

These qualifications are hardly surprising since the Administration and the Fed (it would be more accurate to put the Central Bank first, since the main onus still rests with it) are in fact engaging more in

the virtual collapse of the bond market has forced some prime borrowers, particularly utilities like the American Telephone and Telegraph Company (AT&T), to pare back capital spending budgets to the minimum in order to avoid issuing

securities at crippling interest rates.

We have delayed or put off everything we can which does not interrupt normal operations," said Mr. William Cody, Assistant Treasurer.

U.S. business, in the midst of the second period of soaring interest rates inside six months, is in a much more vulnerable condition than it was last October when the Federal Reserve launched its last anti-inflation package.

For weaker companies it

is becoming a question of survival at these high interest rates, and the same can be said for some parts of the financial system — particularly savings banks and thrift institutions which have around 70 per cent of their home loans earning interest at under 10 per cent while new money is costing over 15 per cent.

But if Washington appears to be worried about the risks of overkill it is equally worried about the dangers of inflation reaching the point where it is running out of control.

It is this threat, and the threat that double digit inflation could run on for the foreseeable future which Wall Street wanted to see tackled with a firm commitment and bold substantive decisions aimed at curbing Government spending, particularly in the area of transfer payments such as social security.

ing securities at crippling interest rates.

In the longer-term the drying up of long-term finance clearly has disturbing implications for capital investment and the productivity of U.S. industry.

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is becoming a question of survival at these high interest rates, and the same can be said for some parts of the financial system — particularly savings banks and thrift institutions which have around 70 per cent of their home loans earning interest at under 10 per cent while new money is costing over 15 per cent.

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Self-inflicted discipline

Wall Street economists already seem to have decided that the fiscal package, whose content was thoroughly leaked in advance, does not meet these criteria or hold out much hope of them being met in the future.

This in turn would seem to cast a shadow over hopes of any dramatic reversal of inflationary expectations.

The consumer credit element

in the package is already being dismissed as tampering at the margins with a declining problem.

The consumer appears to be dislocating himself.

But the Fed's other measures

are being taken more seriously.

The tightening up of the

margin reserve requirements

on managed liabilities at banks,

and the closing of big gaps such

as the banks' freedom to transact with loans offshore, could start to bite soon. This is one reason why short-term interest rates are expected to continue their steep

ascent.

There is also clearly going to be greater moral suasion on the banks to curb their lending growth in line with the Fed's credit expansion targets.

In short, the Fed is sticking

with its gradualist monetary

policy. Wall Street would like to believe that this approach, which has now taken interest rates in the money markets to levels which are beyond the ken of its economic models, will start to make an impact on inflation.

But the events of the weekend have not convinced business that either the President or the Congress can deliver their side of the package.

This reservation is understand

able. For one thing, President Carter does not exactly possess a record for consistency. For another, implementation of much of the fiscal side of his package still resides with the Congress. The Administration claims that it has engaged in "unprecedented" consultation with Capitol Hill in framing its measures and that, therefore, chances of passage are good. Indeed, over the weekend, two Congressional budget leaders, Senator Muskie and Representative Giaimo, said that, if anything, Congress was likely to make deeper cuts in spending than those outlined by the President.

But Congress rarely resolves

things so easily. The powerful

interests whose oxen will be gored when the actual details of the expenditure cuts are made

public at the end of this month

will work to prevent their implementation.

Already, public

reaction from business, labour,

the cities and States has been

negative.

There has been

intense debate inside Congress

in the past week over whether

defence spending can fairly be

exempted from budgetary

stringency.

Anything which

smacks of increasing taxes (as

exists) remains very fragile.

The President was indeed

candid when he said that the

cure for inflation would be both

slow and painful. His senior

officials have been just as direct

in warning that inflation is

likely to remain at or above

existing levels for at least a

few more months.

This, in itself,

constitutes a test for the nerve

of the Administration and the

Fed.

for the financial markets

and for the politicians, all of

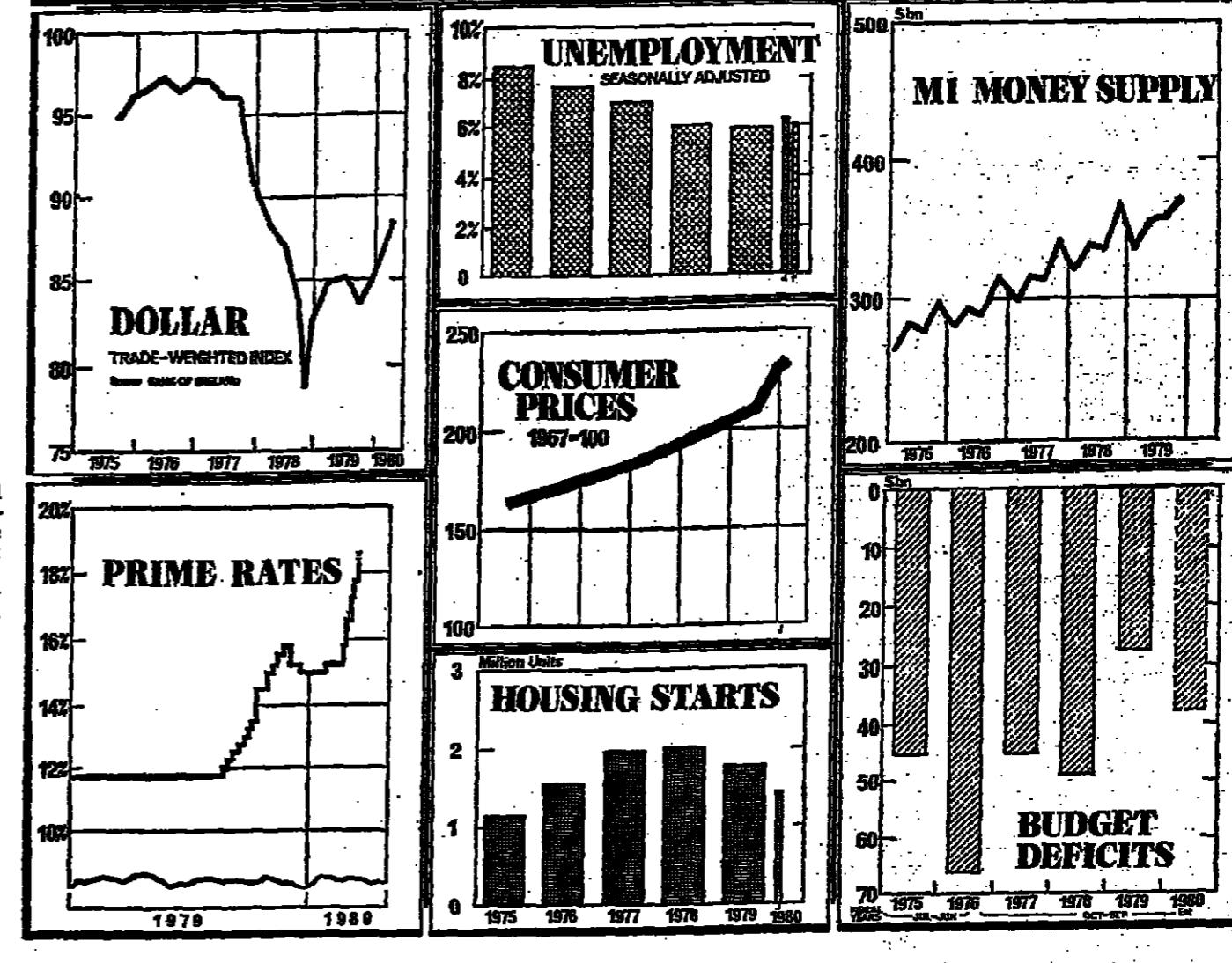
whom are now sailing in waters

which, familiar though they

may be in Europe, are still

largely uncharted in the United States.

## US ECONOMY: KEY INDICATORS



## MEN AND MATTERS

## Dog fight over Dorset

Busy plugging away at the head of the consortium trying to wrest MG sports cars from BL's grasp, running Aston Martin and nursing his property development interests, Alan Curtis has been badly shocked to discover that his personal business favourite, Air Compton, is in danger of being shot down, and his Compton Abbas airfield of being landscaped into oblivion.

He tells me he has been pursued for some years by environmental campaigners who want his patch of Dorset tarmac rolled up, and admits that perhaps he should have taken the threat more seriously. He is doing just that now, however, since the local council has refused to allow him to develop crop-spraying facilities and build a reception area, following pressure from the lobbyists.

While the conservationists have been sniping for years, Curtis says he is the man who has decided to bring matters to a head, and has scrambled to counter-attack, claiming support from local airborne business who use his air taxi service or their own planes, crop sprayers and their farmer customers.

With a couple of kills in the log, his opponents can feel justifiably chuffed. In my book, Airman Curtis, win or lose, richly deserves a sharp smack on the wrist for neglecting one of the prime rules of fighter-piloting and allowing the green belt "bandits" to latch so firmly on to his tail.

## Goodbye Vienna

The gold price may have come a cropper, but the cost of advice for steel-nerved bullion buyers is still shooting up. Gold enthusiast Harry Schulz, who claims dubious fame as the world's most expensive invest-

ment pundit, tells me he has been so snowed under with calls from frightened clients that he is thinking of putting up his consultation fee from \$2,000 to \$3,000 an hour.

Chelsea-based Schultz, an affably hawkish American who combines lugubrious warnings of the Russian menace with unstinting support for the return of the gold standard, has for 17 years been carving a niche in the hearts and bank balances of his international clientele with advice on beating inflation, the taxman and the lurking Communist threat.

His battered visage showing clear signs of the stresses imposed by his prophetic burdens, Schultz is now telling his clients to be "psychologically prepared" for the gold price to fall to \$435. For the moment, however, he counsels against panic and claims soothingly that it could be up to \$900 in time for Christmas. But the kill-joy instincts of the professional seer are hard to suppress. His February newsletter contains the disturbing revelation that the Russians, after mopping up the

land, there's a maggot in this pie." "Come off it, that's fat." "I know it's fat, it's eaten all the meat." Not to be deterred I hear

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## FINANCIAL TIMES SURVEY

Monday March 17 1980



Mrs. Gandhi: direction of economic policy has yet to be set

## CONTENTS

Economy	II	Jute	XV
Labour	II	Iron ore	XVI
Federal role	III	Textiles	XVI
<b>TRADE:</b>			
Trade balance	IV	ENGINEERING:	
Exports	V	Civil engineering	XVII
Imports	VI	Steel	XVIII
Internal trade	VII	Commercial vehicles	XIX
Exports drive	VII	Joint ventures	XIX
Financing exports	VI	Capital goods	XX
Foreign investment	VIII	Machine tools	XX
<b>COMMERCIAL CENTRES:</b>		Power equipment	XXI
Bombay	IX	Electronics	XXII
Calcutta	IX	<b>OIL/CHEMICALS:</b>	
Bangalore	X	Pharmaceuticals	XXIII
Ludhiana	X	Oil and gas	XXIII
<b>INFRASTRUCTURE:</b>		Fertilisers	XXIV
Road and rail	XI	Petrochemicals	XXIV
Power	XI	<b>PROFILES:</b>	
Ports	XII	Aditya Birla	V
Shipping	XIII	Ram Admi Dev	XIII
<b>CROPS/RAW MATERIALS:</b>		Dr F. A. Mehta	VIII
Coal	XIV	M. H. Mody	XVIII
Tea	XV	Bharti Electronics	XXII

INDIA  
TRADE AND COMMERCE

## Suspense over economic policy

BY DAVID HOUSEGO

THE THREE YEARS of Janata party rule that abruptly came to an end in January with Mrs. Gandhi's election victory now look like an interregnum in India's post-war history. Until 1977 Jawaharlal Nehru and his daughter ruled the country almost continuously since Independence as a result of her success in January Mrs. Gandhi and her son, Sanjay, look like dominating India for the first five years of the 1980s and, possibly, for the whole decade.

Mrs. Gandhi's grip on the country is now stronger than her father's and indeed stronger than that she achieved during her previous 11 years as Prime Minister. By her massive electoral victory she has not only removed any Parliamentary opposition to her Congress Party but she has effectively eliminated any challengers from within the party itself. Under Nehru Congress was a loose federation of diverse interest.

Mrs. Gandhi has yet to set the direction of her economic policy. Since returning to power her almost continuing pre-occupations have been with foreign policy in the light of Russia's invasion of Afghanistan and with reassuring her control over state governments which still remained in the hands of her political opponents.

Nehru's legacy was to provide the country with a remarkably broad industrial base that had its roots in a policy of self-reliance, import substitution and the development of a large public sector

to undertake the major investments. Trade had only a marginal role, accounting for only 8 per cent of GNP in 1965 and expanding to only 11 per cent by 1976.

The export-led growth which had boosted the economies of the Far East—in South Korea trade accounted for 58 per cent of GNP in 1978—has been alien to the more inward-looking Indian tradition. It has been almost in spite of this that Indian engineering companies in recent years have made substantial inroads in overseas markets, demonstrating their capacity to compete in quality and price.

## Emphasis

Nehru's emphasis on heavy industry was most forcefully challenged during the three years of Janata rule and particularly by Mr. Charan Singh, who took over as caretaker Prime Minister in mid-1979. The Janata party sought to give more priority to agriculture and anti to small-scale industry as a way of both increasing jobs and boosting demand in an economy that during the 1960s was plagued by under-utilisation of capacity.

Already, during the last year of Mrs. Gandhi's Emergency, there were signs of a shift in policy. The unacceptable price of excessive protection of domestic industry was increasingly recognised as being an inefficient and high-cost manufacturing sector and an unworkable battery of controls and regulations. Her adminis-

tration appeared to be leaning towards a more open economy, a more relaxed attitude towards foreign investment and multinational companies, and increasing support for private industry.

Spurring this change was in part the need to increase export earnings to meet the higher import bill that arose out of the 1973-74 OPEC price increase.

The few pointers that have emerged so far suggest that Mrs. Gandhi is picking up these threads. Both she, and more particularly her son, Sanjay, seem more warmly inclined to the private sector—though in practice this could mean more privileges for selected enterprises rather than any real opening up of the economy to greater competition.

She seems likely to cut back on the higher level of government earmarked for agriculture and to give less priority to small scale and handicraft industries.

But in the past she has shown little inclination for long term economic planning.

Mrs. Gandhi has yet to appoint a number of her key economic ministers, the delay reflecting her habit of postponing decisions to the last moment.

In the case of the economy her immediate concerns are going to be the country's deepening recession and the high level of inflation accompanying it.

After a succession of good harvests, the drought last year has brought a drop in agricultural output. Industrial production is stagnant as well, in spite of a backlog of pent-up demand

resulting from the growth in previous years of agricultural incomes. But India's ability to realise sustainable industrial growth now seems to have bumped up against constraints familiar in that other large continental and developing economy—China.

Output is being held down mainly because of shortages of coal, electric power and rail transport—infrastructural bottlenecks that exacerbate each other, are hard to tackle over such large distances and touch every sector of industry. In turn, they have contributed to a level of wholesale prices in December that is 20 per cent up on a year ago.

The additional external factor in this rate of inflation that creates immense social strains in such a low income country is the jump in oil prices. This also has been the principle cause of the sharp widening in the trade deficit for 1978-80 to about \$3bn.

Concern with these immediate problems risks deflecting Mrs. Gandhi's government from what should be long-term policy goals.

The coal and power industry, and the rail network both need better management and continuing high levels of investment. Exports as well as industrial output have suffered from their poor performance.

The danger is that investment programmes could be shelved as part of overall public expenditure cuts in an attempt to curb the budget deficit and hence the pace of inflation.

Concern over the trade balance also risks undermining

After her electoral victory in January Mrs. Gandhi's main economic anxiety is to bring down India's rate of inflation.

But her long-term goal should be to open up an economy that for too long has been protected against competitive pressures by expanding its overseas trade.

such as the Middle East. Textile exports, though increasing, have failed to utilise fully the available quotas to the EEC. Overall, a continuing hazard for Indian exporters is the threat of government restraints in order to divert shortages of raw materials and capital goods.

A liberal import policy is in line with the more open economy for which some of Mrs. Gandhi's advisers have been pressing.

It is also a touchstone of whether the Government will give its support to programmes enabling industry to modernise their equipment. Corporate profits have been buoyant lately and there are plenty of signs that the private sector would like to increase investment to meet past growth in demand.

But a return to restrictionist import policies would have an adverse effect. It would also encourage protectionist pressures by the Industrialised nations.

## Sharp rise

On the other side of the picture there are more signs of government support for a long-term programme of promoting exports.

Export performance this year has been ragged, with traditional items in the first half of 1979-80 such as leather goods, marine products and jute recording a sharp rise in value terms.

Engineering goods exports fell by 21 per cent however reflecting the problems of Indian industry as well as lack of sustained effort in major markets over inflation.

A great many companies have demonstrated their potential to produce efficiently, earn foreign exchange and create jobs if given the chance. A small number of state governments have also shown that they can achieve higher rates of economic growth given less control from Delhi. It would be sad if the pressures on Mrs. Gandhi to liberalise were checked by excessively cautious policies

over inflation.

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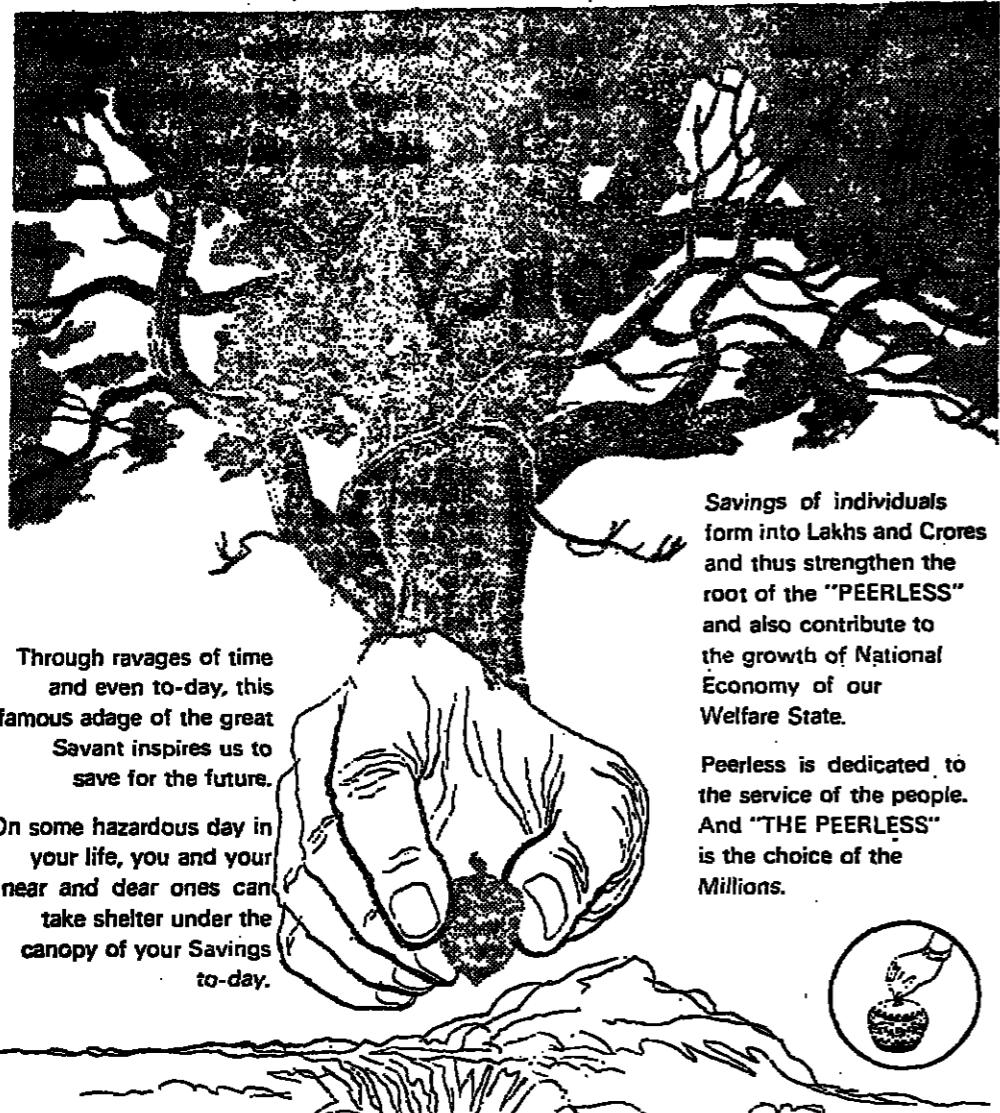


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## ECONOMY

# Need for strong measures to halt the drift

SOON AFTER she came to power in January, Mrs. Indira Gandhi spoke grimly about the burden of the appalling economic legacy she had inherited from the Janata and Lok Dal Governments of the previous three years. In her first broadcast the Prime Minister said that the "Janata Party has dissipated in just 30 months the solid economic, social and political infrastructure built by the Congress over 30 years."

The charge has obvious political undertones but Mrs. Gandhi was exaggerating only slightly. The economy has indeed run into a bad patch once again.

The unusual spell of four good monsoon years ended in 1979 when a severe drought hit most parts of the country and proved an immediate reminder of the economy's continued dependence on rain. It is now accepted that 1979-80 will be a year of "negative growth" and that Gross National Product will actually fall compared with the previous year, reversing the trend of an average growth rate of around 4 per cent in the past few years.

The decline, according to the National Council of Applied Economic Research, could be as much as 4 per cent. Such a serious setback was last registered in 1972-73, when the economic growth slipped by 1.1 per cent and is in sharp contrast to the (now redundant) sixth five year plan's postulated annual growth rate of 4.7 per cent. The stagnation is due to a fall in agricultural production directly attributable to the drought—foodgrain output is expected to fall by about 8 per cent to about 116m tonnes—as well as the possible decline of industrial production, a rare but unpleasant combination.

The crisis, for that is what it is, is exacerbated by the fact that India has rapidly shed its reputation for being among the few countries to have contained inflation. Wholesale prices in 1979 rose by more than 20 per cent causing social tensions that the Government is finding difficult to handle. Part of the inflation was imported, of course, because of the high prices of crude oil which are largely responsible for the record trade deficit of Rs 20bn contemplated

for 1979-80.

But the inflation was, as economists acknowledge, also due to mismanagement of the economy; this really means the absence of effective Government in the past three years. Dr. Raj Krishna, a member of the now dissolved Planning Commission, says that the current inflation is due to three causes: the high budgetary deficit, estimated by him to be roughly Rs 20bn in 1979-80, the rise in money supply by 18 per cent, and the shortage of such essential commodities as sugar, edible oils and vegetables as a result of mismanagement of supply during the year.

Other ominous signs on the horizon are the decline in the stocks of foodgrains, which had

reached around 20m tonnes in

the target of adding 17m by 1984

is unlikely to be achieved. New

generating capacity reached a

level of 3,000 MW last year.

Even though foreign exchange reserves are declining, the deficit is higher than ever before and remittances from Indians abroad show no sign of slowing down.

Mrs. Gandhi rightly complains of a bad economic legacy but the Indian economy always slows down after a drought and it does show signs of basic resilience.

Another drought would be disastrous but the basic ingredients of being able to tackle a critical situation are present and given the political will, the economy could resume its upward trend.

It must also be said to the credit of the Janata Government that it initiated schemes of development that strike at the root of unemployment. India's basic and chronic problem.

There are now in operation such schemes as "Food for Work" an

experimental rural development programme and "Antyodaya,"

which have the potential of catering for the needs of the

already unemployed and under-

employed people in the villages.

So far, however, the problem

remains despite the claim that

the new programmes absorb

about 1m out of the 6.5m people

who join the labour force every

year. Unemployment is now

estimated at 25m.

Unemployment cannot be diminished until the various

factors that have contributed to a

a slump in industrial production

are tackled. The drought has

new Government has shown little sign that it means to tackle the economic problems as speedily as the situation demands.

Yet all is not unmitigated gloom. The current crisis comes against a background of a steady rise in national income in the 1970s, despite three disastrous droughts, a costly war and a tenfold rise in crude oil import prices. A couple of years ago there was actually a trade surplus, albeit of a modest Rs 7bn.

India has built up a strong industrial base that enables it to compete successfully for turnkey projects abroad. In the countryside the area under irrigation is increasing at about 2.5m hectares, although the target of adding 17m by 1984 is unlikely to be achieved. New generating capacity reached a

level of 3,000 MW last year.

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Unemployment cannot be diminished until the various factors that have contributed to a

a slump in industrial production are tackled. The drought has

brought into the open the progressive weakening of the economic infrastructure.

Today the country faces a triple constraint on growth. Thermal power stations set up in the past two decades have failed to work at more than 45 to 50 per cent of capacity in the past decade. The railways are no longer able to meet the growing needs of an increasingly interdependent economy.

The coal industry has failed to increase the supply of this vital energy source.

All these infrastructure industries are in the public sector, whose malaise is evident despite the overall profit Government units have shown—profits which are expected, however, to show a sharp fall in 1979-80.

**Cushions**

There is debate over the level

of investment that should be maintained. Unfortunately, because of the Government's preoccupation with politics, the debate will not lead to speedy decisions since the jettisoned sixth five-year plan of the Janata government will take at least a year to replace. The plan, now obsolete in any case because of continuing inflation, envisaged a total public sector investment in the five-year period ending 1983 of Rs 710,000bn.

To end the infrastructure crisis, says Dr. Raj Krishna, such investments are essential and any cuts would be "tragic."

The plan, he says, "provides for necessary minimum infrastructure investment in crude oil, railways, shipping, aviation, steel, coal, power, etc... Any reduction in this investment would only aggravate shortages of these vital inputs a few years from now. Therefore it would be folly to cut this minimum investment."

The savings rate in India has already exceeded 20 per cent and investment has fallen behind slightly. The problem of increasing investments in the public sector—and this heavily influences investment and growth in the private sector—comes up against the undoubtedly need to check inflationary forces.

Some economists feel that this can be accomplished by checking the high budgetary deficit

(estimated at Rs 135m in 1979-80 but is certain to be much higher). This is not impossible since there is substantial scope for economy in areas like defence expenditure and subsidies to fertilisers and exports.

The functioning of public sector enterprises can be improved, so that their losses are reduced. Prohibition, the introduction of which by Mr. Morarji Desai has led to heavy revenue losses, can surely be lifted.

The Government has announced that it will give priority to anti-inflationary measures but its only economic pronouncements are that it will revive the ambiguous and

politely inspired twenty-point programme that Mrs. Gandhi introduced during her emergency rule.

Fortunately, a Cabinet committee has been formed to tackle specifically the infrastructural bottlenecks.

The Prime Minister has also announced that on the industrial front efforts will be made to increase production as soon as possible through better utilisation of existing capacity, improvement of the poor labour relations that have held back production in all sectors and better management, especially of public sector undertakings.

So far these are just statements of intent. Things will not be easy for the Government. The current economic scene is replete with contradictions—vast but unutilised resources, skilled but unemployed workers, sophisticated machinery not made fully productive and domestic investment lagging behind domestic savings.

The Government's difficulties are increased by the realisation that the India of the 1980s is not the India of the 1950s. Expectations are higher. The people want more clothing, better housing, a more varied diet, efficient public services and generally a better life. With the country's considerable assets in the form of land, industry and manpower, these are not beyond reach. But it needs boldness and courage on the part of the government as well as positive signs that it means to give priority to economic policy and development rather than the lip service that has been evident so far.

**K. K. Sharma**

## Industrial strife gives way to peace

MRS. INDIRA GANDHI'S

general election victory coincided with a startling lull in industrial strife—perhaps no surprise in view of her stern handling of labour disputes during the emergency period.

But few industrialists are yet confident that a path of industrial tranquillity lies ahead, if only because they have just emerged from one of the most turbulent years on record.

More than 40m man-days were lost in 1979 as a result of strikes, lock outs or other disputes. This contrasts with 12.5m days lost in 1978 (during the Emergency) and is on a par with 1974, which was India's worst-ever year for industrial strife: 40.2m man-days were lost.

In her inaugural speech after the January elections Mrs. Gandhi claimed that half of India's installed industrial capacity had stood idle in 1979.

Industrial output was the victim of more strikes and lock outs. Management complained that still more damage was inflicted through go-slows, work-to-rules, "gheraos" or lock-outs, malingering, clock-watching or petty sabotage.

The year 1979 offers a litany of costly and often pointless strikes across the whole range of Indian industry. Bank workers at Grindlays struck for 92 days, insisting that their minimum bonus be raised from 8.3 per cent and that there must be a veto on mechanisation which cost jobs. They returned to work without achieving either of their objectives.

Other banks nationwide were affected by strikes for about 200 days, and cheques were cleared on just 150 days.

**Capitulated**

Workers at Motor Industries Company (MICO) in Bangalore went on strike after management sacked or suspended about 40 men. When the company capitulated 35 days later, it had lost an estimated Rs 180m in output while the workers had lost Rs 20m in wages.

At the Moonidih coal mine near Dhanbad in Bihar's Bharat coalfield, miners went on strike three days before the "Holi" festival because they wanted payment two weeks ahead of schedule: they wanted extra spending money to fuel the festivities. The management, unable to mobilise funds at such short notice, were helpless. Three days

real industrial labour force—one that is reconciled to turning up for work at the same time, five days a week, and working for eight hours.

"The whole notion of a stable industrial labour force is something which has had to be formed only since Independence in many parts of the country."

This to some extent explains the "gandhism" or gangsterism that is rife in certain areas—particularly in the tribal areas of the Bihar coalfields. It explains too the sabotage of machinery which often accompanies strike action.

It also in part explains widespread absenteeism, for example where a Marxist government is in power. The unions aligned to the Communist Party-Marxist (CPM) of the main union at Bombay port, admits that absenteeism averages 20 per cent and rises to 30 per cent in April, May and June—the peak period for planting crops in the villages.

A similar pattern is reported

CONTINUED ON NEXT PAGE

## Calcutta is UBI city

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# Dissident States pose unruly challenge

THE RESULTS of the January parliamentary elections were as unequivocal as in 1977, so Mrs. Indira Gandhi should feel reasonably sure of an unchallenged innings for at least the next five years.

Since she has a comfortable two-thirds majority in the Lok Sabha (lower house of parliament), the people should also reasonably expect stable and consistent policies from the Government for the next few years because electoral compulsions to cater to the electorate should not arise for some time. Yet there is uncertainty about this.

It is early to judge Mrs. Gandhi yet. Her preoccupations so far have been either political or with foreign policy. This is because of the situation in the country, where she found a majority of the 22 States arrayed against her, and that on her borders because of Afghanistan.

Her preoccupations led to an unceremonious bidding out of power of the parties that controlled nine non-Congress States and elections to these are to be held in June. For this reason, Mrs. Gandhi's first Budget has also been postponed. For some time, therefore, the country will not know what the long-term (or, for that matter, the short-term) policies of the Government will be.

## Legacy

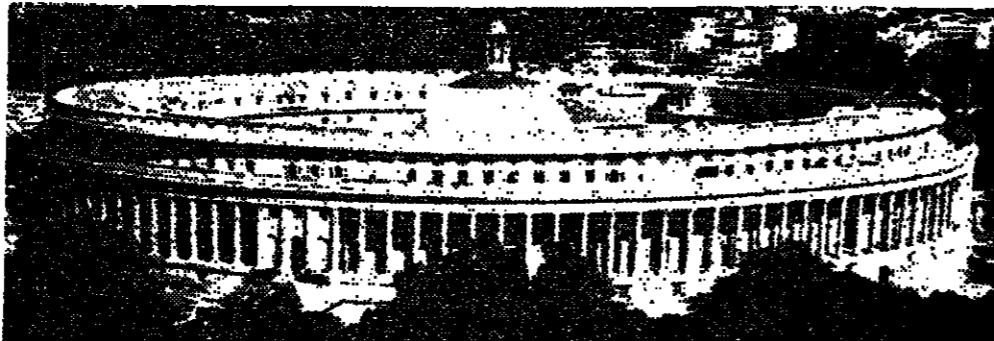
This must give cause for concern. Mrs. Gandhi, in the past, has acted when she feels her own position is in peril. There is no immediate danger to her and so she does not, despite her constant criticism of her predecessors for leaving her an undoubtedly bad economic legacy, feel the need to take action quickly to tackle the critical economic situation in the country.

It is unlikely that any major decision will be taken until Mrs. Gandhi is sure that the States—one of the major ones of which have no Government of their own—are behind her. This will be in June and so Mrs. Gandhi will have let six valuable months slip by.

Yet one must not be too harsh, for politics has its own compulsions. Since India has opted for a federal Government and Mrs. Gandhi insists that the central administration must be strong, she must be in a position to ensure that her policies are carried out. With a majority of the States opposed to her, she would have found it difficult to have them carry out the central government's writ.

In fact, in dismissing the non-Congress States, Mrs. Gandhi did no more than the Janata Government in 1977. The nine States placed under President's Rule last month (February) are not the same as those dismissed by Mr. Morarji Desai in 1977. They include Tamilnadu in the south, whereas in the past action was taken only in the north.

They do not include West Bengal where the Marxists have demonstrated their invincibility even though Mrs. Gandhi, like



The Federal Parliament building in New Delhi

Mr. Desai, must have been tempted to use the hatchet there.

Since the precedent was set by her opponents, both the Justification for Mrs. Gandhi's step and its legality cannot be challenged. In any case, few years need be shed since the then Governments in power for the past three years were as inactive as that at the centre especially in the key States of Uttar Pradesh and Bihar. The precedent has now been established that the results of Parliamentary elections, if they are as sweeping as in 1977 and 1980, must supersede the earlier judgment of the electorate in the States if this proves to be different.

Both Mrs. Gandhi and her father rarely hesitated to remove—recalcitrant chief Ministers, even when they belonged to their own party. The constitutional provision for dismissal of State Governments and imposition of President's Rule (which means, in effect, direct rule from New Delhi) has been resorted to frequently.

It went into abeyance during the three-year spell that Mrs. Gandhi was out of power since Mr. Desai and Janata believed that the States should have more freedom to go their several ways. The experiment was not entirely successful since the federal structure came under such severe strain it seemed that dormant tendencies for secession would become active (particularly in the northeast where they are again active in Assam).

The States, moreover, made such demands for autonomy, particularly for financial autonomy, that even Mr. Desai's tenure as Prime Minister, on demands for more fiscal autonomy although the Marxists can be expected to keep up the chant on this. This question was resolved towards the end of Mr. Desai's Prime Ministership when he came down firmly and asserted the supremacy of the Centre. But over the years there have developed many other interests and groups articulating them that impose strains on the Indian system.

A major example, and one that covers the country, is the stirring in the villages and among the country's millions of poor farmers who want to assert their rights. Politicians find them ready-made material for their own purposes.

The demands were such that they all but paralysed the planning machinery, the States refused to consider the draft of the Sixth Five-Year Plan formulated by the Planning Commission until their demands were considered. Such was their insistence that the Plan has never been approved.

The lesson to be drawn is that the Indian federal model does not really function if there are in power in the States political parties that are eager and willing to challenge the

central government. This can halt normal governmental processes even if there are only one or two such States. Indeed, Mr. Desai was stalled really by the (Sikh) Akali party in Punjab and the Marxists in West Bengal, the two States that were to the fore in the demand for more autonomy, even though they were the Janata's allies.

Will the States allow Mrs. Gandhi to enforce the supremacy of the central government? By dismissing the nine non-Congress Governments in the States Mrs. Gandhi has indicated her determination to ensure this, even though there is no guarantee that the electorate will vote the Congress Party in June (State elections need not necessarily follow the pattern of parliamentary elections, especially when, unexpectedly for Mrs. Gandhi, the intervening period is as much as six months).

If the Congress Party does not win in even one or two States, Mrs. Gandhi is in for trouble. Taken with the Marxists who have not been touched in West Bengal and Tripura, even one or two additional obstreperous States could put reins on Mrs. Gandhi.

## Resolved

This is unlikely to be concentrated, as it was during Mr. Desai's tenure as Prime Minister, on demands for more fiscal autonomy although the Marxists can be expected to keep up the chant on this. This question was resolved towards the end of Mr. Desai's Prime Ministership when he came down firmly and asserted the supremacy of the Centre. But over the years there have developed many other interests and groups articulating them that impose strains on the Indian system.

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K. K. Sharma

"We simply have to convince workers that it's in their own interests to adopt more sophisticated technologies."

Workers point out that the companies' plans involve pegging the work-force at the present level of 4,000. With more people coming onto the job market every year, they are worried how their children will find jobs if such growth policies prevail.

An industrial relations Bill was drawn up by the now ousted Janata government. Opposed by employers and workers alike, the Bill has died a natural death. But a new policy is urgently needed. The new Congress government is drawing up plans.

In the meanwhile, the industrial atmosphere has improved since the agreement in November to give railway workers a productivity bonus worth Rs 350m—about 15 days' wages per man. The agreement is a productivity deal in the genuine sense, and may set a pattern for future wage deals.

At the same time, the Government will be under pressure to encourage some kind of rationalisation of union structures, to devise labour courts or tribunals for arbitration purposes, to curb violence and sabotage in strikes and to establish a wages policy, possibly involving index-linked wage deals.

But for the moment, industrial peace prevails. As Mrs. Gandhi makes the most of her post-electoral honeymoon, so workers are no doubt thinking back to what the CTU leader Mr. Monoranjan Roy called the "semi-fascist terror" of the 1973-77 Emergency period. As they pause for thought—and for breath—at the end of a year of terrible conflict, the new Congress government must dearly hope that the peace will last.

David Dodwell

هذا من المهم

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Mrs. Gandhi has announced that law and order are high on her list of priorities, even more than getting the economy going again. This is undoubtedly because she is aware that progress in the first has a bearing on the other. Indeed, for both she needs the co-operation of the States.

## Spectrum

Another development is the consolidation of castes and communities, particularly in the Hindi-speaking States, although the Parliamentary elections results showed this has not taken place to the extent many intellectuals thought it had. Yet it is also true that parties like the Lok Dal, led by the "Jai" (farmer) leader, Mr. Charan Singh, is closely identified with backward classes, while the bulk of what remains of the Janata Party draws its support from a broader spectrum of castes and classes.

Since these are forces not quite as strong as thought prior to the Parliamentary elections, they can be checked if Mrs. Gandhi takes note of the reasons for the development of the pressure groups. If the coming State elections show that the Lok Dal and the Janata are not spent forces, she will need to act quickly, especially if they win large blocks of seats in the legislatures.

However, it is now evident that the ruling parties' in the States cannot make extravagant demands on the central government in the manner they have in the past without frustrating their purpose or coming into collision with it. In fact, Mrs. Gandhi's reputation for seeking to act firmly on behalf of the central government will probably itself have a deterrent effect.

This may happen even in West Bengal where the Marxists have voiced fears that Mrs. Gandhi is just waiting for an excuse to oust them, so they have to enforce discipline among their workers to avoid giving provocation to her. It remains to be seen how the Prime Minister will control other manifestations of parochialism; there is little doubt that she needs to tread carefully if the federal structure is not to be excessively strained.

In almost every country, the energy problem is assuming crisis proportions.

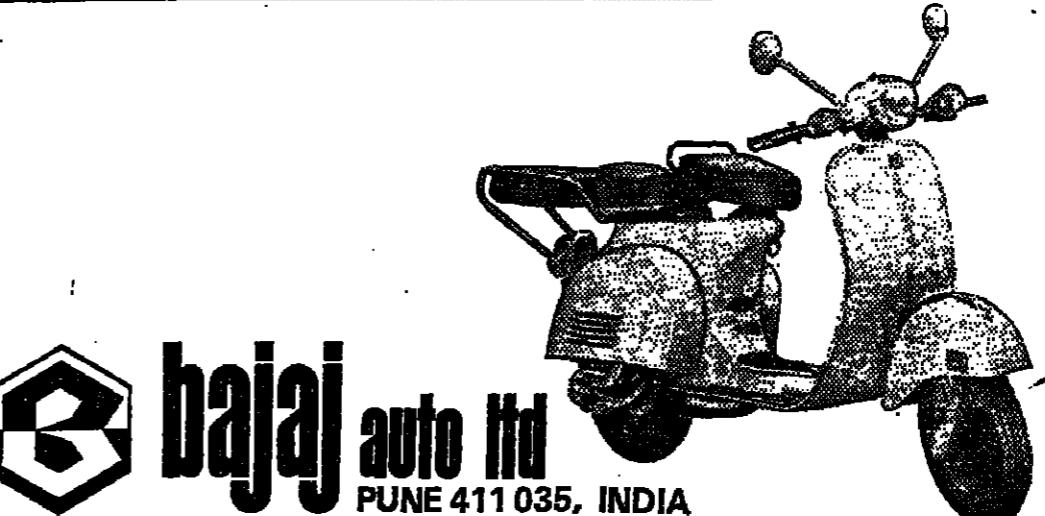
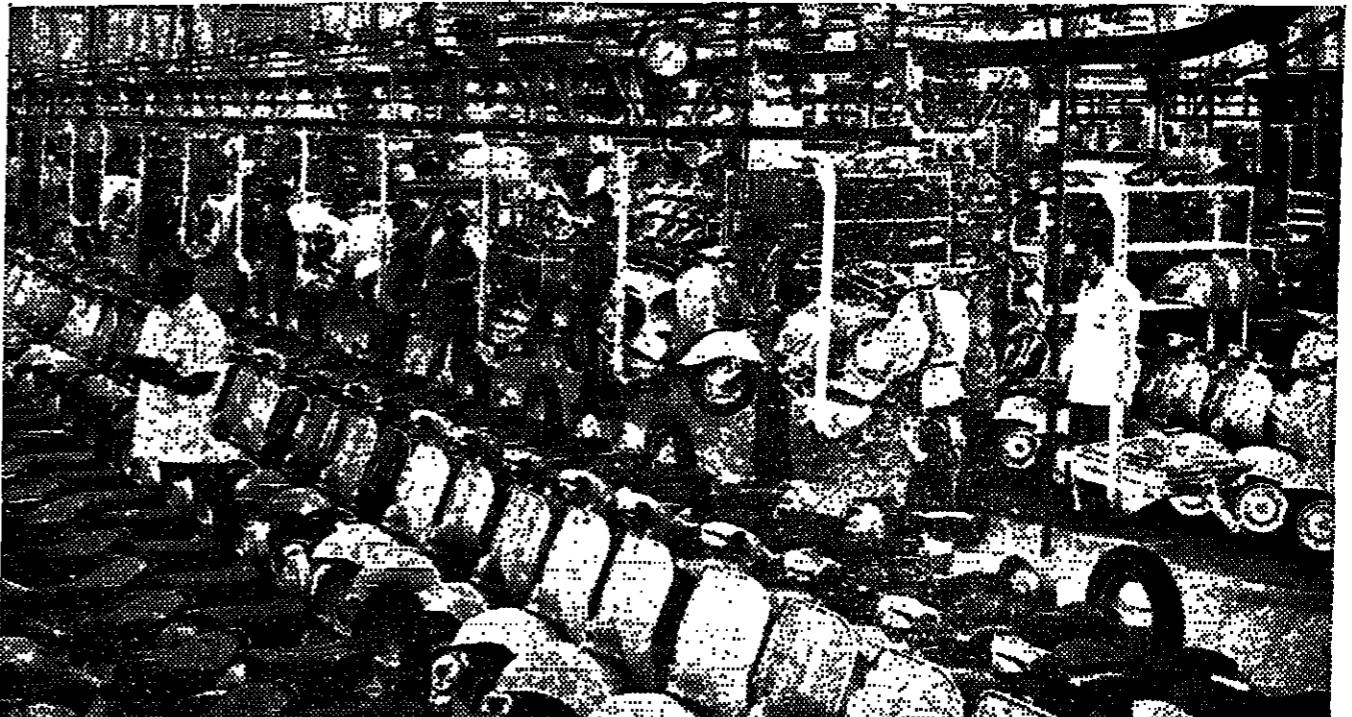
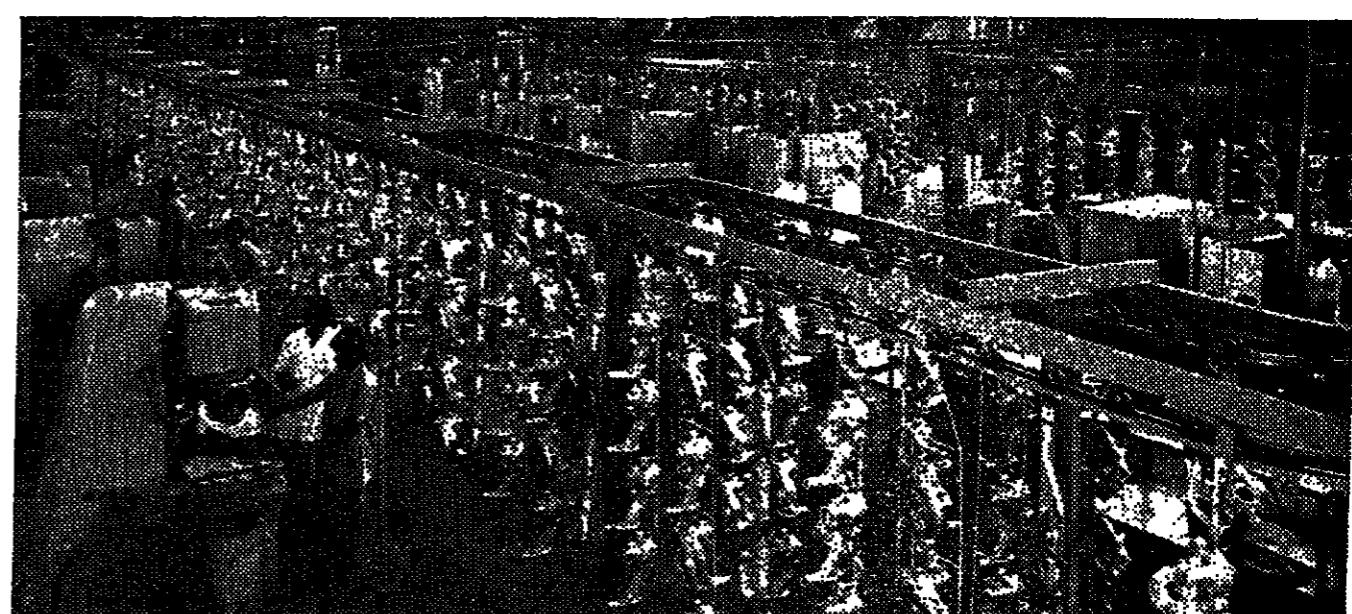
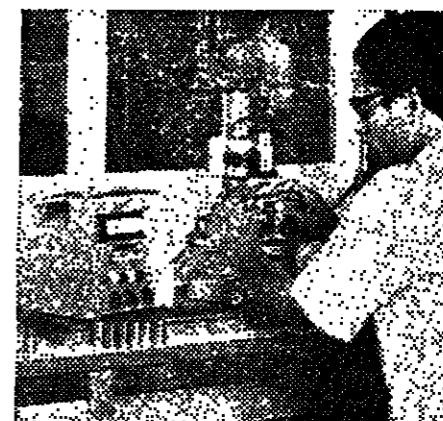
And yet, people must get to work, get to market and get back to their homes.

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An attempt to end the exploitation of child labour has been abandoned. Here, villagers attend a local centre operating as part of India's family planning programme

World Bank picture

begin to foment trouble. They could be confident of support from Congress politicians, just as CTU unions could depend on the CP.

Across the country, similar power play was rampant, and as these unions vied for support, so industry was the ultimate casualty.

With Mrs. Gandhi now firmly ensconced in Delhi, one would expect this rivalry to subside: the structure of patronage has been fixed. Only in areas like West Bengal and Kerala, where the Communist parties have kept control of federal seats at the same time as running state Government, can conflict be expected to continue unchecked.

Even trade union leaders despair at the consequences of such conflict. Mr. Kulkarni, who leads the predominant Hind Mardoor Sabha (HMS) union in Bombay port, complained: "Many strikes take place only because of undue interference by the Government or opposition parties, every political party tries to control labour, often with chaotic consequences."

"I believe that labour should create its own lobby. Workers should be given the right to elect leaders through secret ballot, and whichever union gains a majority vote should be regarded as the sole bargaining agent for the whole work force."

Mr. Subrata Ray, director of planning and research at Bombay port, confessed: "We are singularly lucky in not having a broad multiplicity of unions here."

Calcutta port does not share the same luck. Inter-union rivalry is in large part responsible for the port's appalling work record last year. While it lost more than 100,000 man-days, Bombay lost 44,000.

Mr. D. H. Pal Panandiker, deputy secretary-general of the Federation of Indian Chambers

of Commerce and Industry (FICCI), said: "It is not wage demands as such that are a problem for industrialists. You find that in every industry you have so many unions, each competing against the other. As they war among themselves, so industry is paralysed."

A similarly severe problem is resistance to mechanisation. Mr. Monoraj Roy, leader of the Communist Centre of Indian Trade Unions (CTIU) in Calcutta, complained: "Here in West Bengal, the main problem is shortage of employment—of unemployment and retrenchment, of setting up machinery, reducing the employment potential of industry as a whole."

The managing director of a major international electrical company with its headquarters in Calcutta explained: "Our labour relations problems are peculiar in that they are concentrated completely on improving productivity."

"We aim to double output in the next five years, but to do that we are looking for a doubling or trebling of productivity. We are prepared to pay well, but only in return for higher output."

David Dodwell

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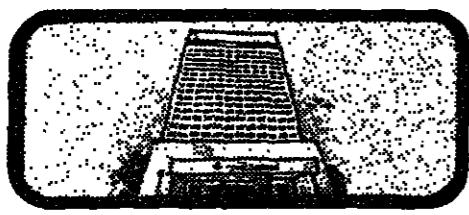
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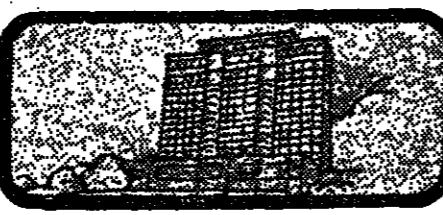
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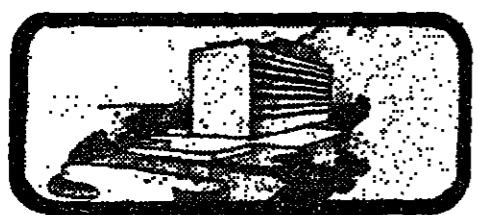
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## TRADE

# Alarm bells as deficit gets bigger and bigger

INDIA'S FOREIGN trade deficit in the current financial year ending this month will be the heaviest ever; next year's will be even worse. Exactly how big the deficits will be is still a matter for speculation, with different figures being pulled out of different hats in New Delhi.

But certainly the alarm bells are ringing because it seems likely that this year's deficit will not be covered by earnings from tourism, remittances from abroad and aid, and that India will have to draw on its foreign exchange reserves. Next year's prospects are even gloomier.

As to the 1979-80 trade deficit, Mr. Prafull Kumar Mukherjee, the Commerce Minister, said recently that he feared "the figure may cross Rs 20bn (\$2.5bn) by the end of the present fiscal year." The National Council of Applied Economic Research estimated the same sort of figure, but the Indian Chamber of Commerce goes as high as Rs 30bn (\$3.75bn). Foreign economists estimate a deficit this year of about \$3bn, rising to \$5bn in 1980-81.

In the January issue of its quarterly journal, the National Council of Applied Economic Research gave the following reasons for the growing trade deficit: "Increasing import price of petroleum crude, liberalised import policy pursued by the Government since 1977, inadequate increase in domestic crude production, protectionist policy of developed countries, and inadequate growth in India's industrial output and thus exportable surplus.

Such is also the explanation favoured in Government offices in New Delhi—in effect a mixture of unfavourable external circumstances like higher oil prices and protection in the West along with political turmoil at home setting up an unfavourable chain reaction.

The last point is taken up with vehemence by Indian industrialists and businessmen from Calcutta to Faridabad and from Ludhiana to Bombay and Poona. "How can we export," they exclaim, "when we are denied power, when our goods move slowly from the factory to the docks, and are then delayed at the port by industrial unrest?"

### Comical

Stories which would be savagely comical were they not a sad indication of India in 1980—power stations carting coal a thousand miles across the country by lorry, as and when they can get the diesel fuel for the lorries; jute and tea shipments in Calcutta held up for more than a hundred days a year because one group or other of workers is dissatisfied.

"Our hundred and thirty-five workers out of the 30,000 employed there held us up completely," said one company director; the big industrial group waiting for imports and finding that the ship had docked and then gone away again because of the slow unloading, and when the cargo did land a special "levy of Rs 200 a wagon had to be paid to persuade the railway workers to send the goods out of the port area."

To such businessmen there is a simple prescription and Mrs. Indira Gandhi is good news because she will supply it: "Discipline and let us get people working." One senior director even suggested: "A couple of battalions of the border security force will set things right. Possibly a few people might get shot, but discipline has to be restored. Let the power flow, let the coal move, let industry produce, let the railways work and the ports run smoothly and we can get the country on the move."

Other economic analysts able to take a more detached view than businessmen who have to bear the brunt of delays and inefficiencies suggest that a much wider action programme is needed.

The National Council recommends the following measures: "Maximisation of exports, selective approach to imports, intensified search for new indigenous sources of fossil fuels, increase in domestic production of edible oils, and measures to attract foreign exchange remittances from abroad."

It warns: "With the stagaa-

tion in industrial output it is unlikely that the country will be able even to maintain the moderate 4.8 per cent rate of export growth achieved in April-October 1979. Efforts to step up exports require not only an overall improvement in industrial output but also the capturing of new world markets, special incentives in the form of raw material and import entitlement quotas, and minimisation of export delays as a result of congestion and strikes at port."

All of this is easier said than done. Exactly how the new Government will deal with the problem is not quite clear; political problems are still pre-occupying Mrs. Gandhi as she tries to bring the State Governments under her control. More than two months after her triumphant election victory she still has not appointed a full economic ministerial team. Mr. Ramaswamy Venkataraman holds the portfolio of industries as well as that of finance; the Commerce Minister is also in charge of Steel and Mines, giving them both onerous loads.

### Sharper

The indications are that there will be no radical break with the past, but there will be an attempt to curb imports and promote exports within a sharper management framework.

Mr. Mukherjee said recently that India's import policy might be changed. It could not remain liberal, he said, "to the extent of unnecessarily whittling down our foreign reserves. Nor can we give a low priority to exports, the growth rate of which has been slow in the last few years."

Such is also the explanation favoured in Government offices in New Delhi—in effect a mixture of unfavourable external circumstances like higher oil prices and protection in the West along with political turmoil at home setting up an unfavourable chain reaction.

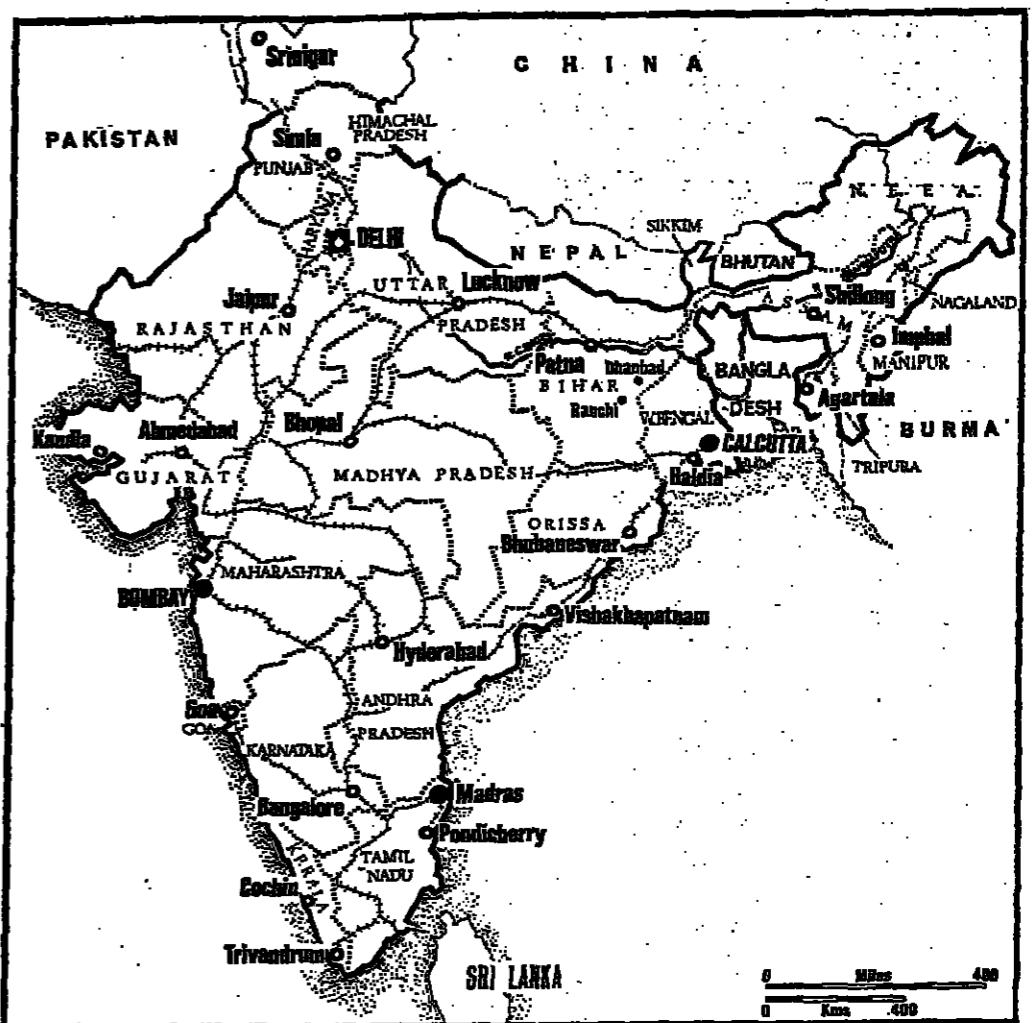
The pragmatic approach to trade certainly seems to be the one recommended by Indian Commerce Ministry officials. It worked before and probably fits in with Mrs. Gandhi's style of operation. Crisis committees can sit with representatives from each Ministry, and decide which exports should be encouraged—backed if necessary by a battery of incentives—and which imports should be curbed and which allowed.

There is scope for such a technique. Last time sugar and silver helped to close the trade gap. Today vigorous export of those particular commodities would cause political problems, but there are others which could be chosen. Export of groundnuts, today banned to reserve them for oil seed, could make a few hundred million rupees from the international cocktail market. Giving priority assurance of power and shipping space to engineering exports should help them towards the target of Rs 10bn, if not by 1980-81 then by the following year. Such exports have been especially badly hit by the present crisis and are likely to fall below last year's figure of Rs 7bn.

On the import side there is also room for improvement. Large imports of edible oils, costing about Rs 8bn to Rs 9bn could almost certainly be reduced, as could imports of fertilisers, aluminium, steel and cement. These items account for 20 per cent of the growth in dollar terms of imports. In addition, careful spotting and selection of export markets would lead to continuous liberalisation of imports of goods—inputs for synthetic textiles would be one area which would lead to higher export earnings.

But what to do with the largest item on the import bill is more difficult. India's oil bill has shot up from Rs 2bn in 1972 to Rs 30bn in the current year, which is between 45 and 50 per cent of export earnings. Next year oil will cost about Rs 45bn assuming no further increase in price and that demand for oil will increase by 10 per cent. The country has increased its own oil production and is intensifying efforts to find domestic sources. Imports today are 60 per cent of India's oil needs, against 85 per cent immediately after independence.

Domestic production is expected to reach 17m tonnes this year, compared to 12m last. But with oil needs for the year 2000 estimated at 60m tonnes, it warns: "With the stagaa-



of which domestic production would be about 24m, the Government faces a dilemma. If in terms of the last quarter of the 20th century today is an era of cheap oil, it may be better to conserve as much as possible of domestic supplies for the day of expensive oil.

Uncertainty about oil and the size of the deficit it might fuel has led some economists to urge a departure from India's traditional limited idea of seeing exports as a means of paying for imports or as a temporary vent for excess production. Instead, such commentators urge, exports should be a target and a means of stimulating economic growth. They should even be made profitable. The tendency has been for the government to step in and impose additional duties when it looks as if an exporter might make a windfall profit; this happened at the end of February when a duty of Rs 1,000 a tonne was placed on jute exports.

This policy has encouraged producers to rely on the safer and more profitable home market. Piling up industry and improving efficiency are reasons why the World Bank is backing the idea of export-led growth for India. In its world development report 1979 the Bank had some specific remarks about the dangers of import substitution imposing high costs on overall economic development: "Even in larger economies such as Brazil (at least until 1965), India, Mexico and Turkey, the prolonged use of protective measures has contributed to the development of high-cost inefficient industries. Moreover, an important corollary of the protection afforded to manufacturing is its disincentive effect on agricultural production. Import substitution policies have tended to limit agricultural growth, and hence domestic demand for manufactured goods, while simultaneously keeping industrial production dependent on internal purchasing power."

### Perspective

This is the problem—that a switch to a regime dedicated to open trade would fit in the face of the policies of 30 years, and not just trade but industry and the whole economy. The perspective in New Delhi still seems to be inward-looking and indeed remarkably lacking in self-confidence for such a big country and one which sees itself as a leader of the developing world and an industrially sophisticated nation.

Officials, experts and businessmen alike stress the dangers of trade in a climate of growing protectionism. This is despite evidence collected by the World Bank that the strong trading nations had managed to deal with protectionism best. Certainly South Korea's textile exports of \$3.5bn are a better advertisement than India's \$450m. Though India moans about the closing of markets to

can you be surprised that our exports are only seven per cent of GNP, the same proportion as in the U.S." Another favourite expression is: "We have this vast home market to satisfy first."

This really is an Alice in Wonderland world—when per capita income is still about \$150; when growth this year will be negative, when power and production is constantly disrupted; when of the annual addition to the labour force of 5.5m only 550,000, or 10 per cent, gain employment in the organised sector (including mines, manufacturing, utilities, public services and major trade and transport organisations); when 48 per cent of the rural people and 41 per cent of the urban dwellers—290m Indians—live below the poverty line.

Kevin Rafferty

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### DIRECTION OF TRADE

	(percentage shares)			
	1950-51	1960-67	1970-71	1977-78
Africa	Exports 9.7	5.3	5.4	5.1
	Imports 13.0	4.6	8.0	4.4
U.S.	Exports 18.5	15.7	13.5	12.5
	Imports 18.5	29.2	27.7	12.5
Middle East	Exports —	5.5	10.4	12.9
	Imports —	6.5	10.2	22.4
Eastern Europe	Exports 6.6	7.8	22.6	16.1
	Imports 1.1	4.0	13.9	10.3
Western Europe	Exports 32.4	27.3	19.6	28.3
	Imports 32.1	39.9	21.4	23.2
of which:				
UK	Exports 22.4	19.4	7.8	7.7
	Imports 20.8			
Other	Exports 38.8	28.4	25.7	24.1
	Imports 35.3	15.8	18.8	21.2

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# Exports slump as nation's holdups multiply

A FEW years back, India's exports were booming, rising by 25 to 30 per cent a year, and the pundits freely forecast that the country was discovering "an export culture" with daily sales successes, especially in the growing Middle Eastern market, with orders won in the face of fierce competition from the West. With exports rising from 4 per cent of GNP to almost 7 per cent, the hopes seemed reasonable.

But today they look sick. Not only is India facing its biggest ever trade deficit, but export growth has slumped. Two years ago export growth was small, about 5 per cent, a year ago it was smaller, less than 4 per cent, and in the current year ending this month it may be same as last year or just possibly negative. In terms of earnings, exports shot up from less than Rs 20bn (£1.08bn) in 1972/73 to more than Rs 51bn in 1976/77. In 1978/79 earnings were Rs 58.2bn. In the first half of this year the growth rate was 4.8 per cent, but in view of the stagnation of industrial output it is unlikely that even such a modest rate can be maintained, so exports may be less than Rs 59bn.

Of course there are particular difficulties this year. Time after time, businessmen and exporters have complained about breakdowns in the whole infrastructure from power supplies to shipping space. It is instructive to quote from a plaintive paper prepared by the Engineering Export Promotion Council last month for Mr. Pramod Kumar Mukerjee, the Commerce Minister. In recent years, engineering exports have been the star performers in India's trade, rising from about Rs 1bn in 1969/70 to Rs 7bn last year and with high hopes of exports of Rs 10bn next year and Rs 100bn in 10 years time.

## Framework

But this year, says the council, the engineering industry as a whole, and the exporting sector in particular, has greatly suffered during the past 12 to 15 months from the complete breakdown of the economic system. As a consequence, the basic inputs and infrastructural facilities like steel, pig iron, coal/coal, power, diesel, railway and road transport and shipping, so essential for engineering exports, were not available. Import of basic raw materials was permitted, "but" the council said, "export was

not competitive on the basis of imported material."

Clearly from that account, it is not just a failure of power, problems of labour, erratic rail and shipping movement, but also a failure of policy. At a time when the trade deficit was growing and exports jeopardised, when the Commerce Ministry was keen to push exports, the Industries Ministry stepped in and banned certain categories.

Consideration of the policy framework is essential as it is clear that India's carefully checked and balanced system of licensing restrictions has prevented and continues to prevent the emergence of a full-blooded export regime.

Within its own limits, the policy has had successes. As Mr. Vijay Kelkar, adviser to the Commerce Ministry, pointed out in a thoughtful paper early this year, both the range and quality of Indian exports have vastly improved. At the time of independence, the U.S. and the UK between them took more than 45 per cent of India's exports which consisted largely of agricultural products, crude materials and simple manufactures like jute goods and cotton textiles. In 1951-52, exports of iron and steel goods were about \$3.3m and of engineering products \$1.2m.

In these terms the structure of India's exports has changed completely. The spread of markets to which India is exporting is wide and well distributed. Although the West as a whole takes more than half of India's exports if Japan is included, several regions of the world take more than 10 per cent of India's goods: 13 per cent goes to the Middle East, 16 per cent to Eastern Europe and 12 per cent to developing Asia.

Manufactured goods account for about 60 per cent of the exports (though this year the percentage may be lower) with a large part accounted for by technology intensive products such as engineering goods, electronics, and chemicals.

Mr. Kelkar points out that the "concentration index" for products has declined to 23 and the "geographical concentration index" reflecting the areas to which the exports go, has declined from 69 in 1947 to 22.

A curious feature of the paper is that the Commerce Minister adviser is keen to stress India's "self reliance" and "lack of dependence."

Though he later points out the potential losses to the economy from neglecting trade, Mr. Kelkar almost apologises that exports are as high as 6.22 per cent of GNP in 1977 as it might be said that this implies dependence. He says this share does not seem to be "excessive."

What the future is for Indian exports is difficult to analyse. There is plenty of scope for expansion. Anyone who has seen the variety and the quality of some Indian exports can only be surprised that they are still so low. The Middle East still offers opportunities. Indeed, though at the time much was made of Indian successes in that region, the Indian Chamber of Commerce cites figures to show that between 1971 and 1977 the Indian share of Arab Markets' imports actually declined from 1.76 per cent to 1.45.

## Greater sales

With the opening of the Indian Trade Centre in Brussels specialising in seven major product areas, it might be hoped that there will be greater sales at least within the EEC as Europeans get a better chance to see the range of Indian goods and Indians may better appreciate the European market and its wants and needs.

But after a short time, anyone considering the issue bumps hard against the question of whether India really wants an export boom or is prepared to take the policy measures to set it going. Against practically all exports there are questions and clashes with India's overall economic policy as it is now set out.

Traditional items like tea, jute and leather have this year shown a brighter picture than non-traditional exports. Leather exports rose by 28 per cent, cotton textiles by 17 per cent and jute goods by 20 per cent in the first half of the year as engineering exports fell by 21 per cent and jewellery by 41 per cent as the world market shrank. But in the traditional items, especially tea and jute, the growing home market has already reduced exports.

In a poor country the ready availability of "the cheapest beverage in the world" has increased home demand and reduced the exports to a minority share of production. Bad harvests because of drought, irregular shipments and the

anxiety of the Government quickly to cream off anything it thinks of as an excess profit as prices rise have also contributed to make India what Calcutta tea interests call "a residual rather than an essential world exporter."

With forecasts of domestic demand rising as high as 1,200 to 1,400 kilograms by the turn of the century against present production of 545 kilograms, there is a need to replant and extend the size of the gardens if exporting is to continue. But tea interests say that with the heavy rate of taxation "there is precious little left for ploughing back, and credit has become tight and expensive these days."

Jute exports have also fallen to 40 per cent of production

and Mr. K. K. Bajaria, chairman of the Indian Jute Mills Association, expects a further fall to 25 per cent over the next five years.

He complains that it is difficult to increase labour productivity as some politicians are demanding that the manning levels should be increased even though in the Indian mills four or sometimes five workers are doing the job of one person in an equivalent European mill.

The jute picture is complicated because the Marwaris who own most of the mills are nearly universally regarded as poor employers but in this traditionally large export area there is a case for doing something quickly while there is still time.

Non-traditional items are not constrained by shortages of land or production that is at the mercy of nature, but some of the barriers may be more difficult to break down. They include economic policy, political horizons, knowledge and adaptability of men and institutions.

One remark which I encountered frequently, and more frequently in Government than business offices, was that Indian goods were suitable for other developing countries. Seen in the wrong way this might be regarded as dangerously paternal. The faster developing countries might prefer to buy higher technology and more expensive goods from the West if they thought they were being pained off with anything inferior or shoddy.

Interestingly enough, officials in some other Asian countries have a prime complaint that Indians sell their goods as if they were shoddy. To quote one trade official from South East Asia: "The quality of

Indian goods is good to very good, but their promotion is awful. Ask them for literature or look at their packaging and it frequently comes almost in brown paper as if they are ashamed."

Another question is what will be the most important markets for India. And all the indications are that the high volume markets are in the West. The World Bank, in its annual development reports, has suggested that increasingly the Eastern European countries are going to offer competition rather than sales to developing countries, yet the demands of India's foreign policy may push it closer to the Soviet Union and emphasise the need for a balanced trade. Certainly it is noticeable that the pro-Soviet lobby in the Indian Parliament is hyperactive and when the West is mentioned it is usually for criticism.

If India wishes to increase

engineering exports to Rs 100bn by 1990, a ten-fold increase in 10 years, a whole new style of operating will be called for. Such a rise calls for qualitative changes in production technology, design, labour and Government policy.

## Criticism

It is worth quoting from the evidence of the Indian Chamber of Commerce to the official committee under Prakash Tandon, head of the National Council for Applied Economic Research, which is examining India's export strategy in the 1980s. In practically every line there is an implied criticism of present attitudes and policy.

"It is important to fashion the economic policies which have an impact on the investment climate, to create conditions conducive to maximum capacity utilisation and make them more attractive to potential investors. The vital role

played by profitability, uninterrupted and adequate cash flows and high capacity utilisation cannot be overemphasised."

"Indian industry has to compete with modern, high technology production processes of the Western countries. Therefore advantages due to economies of scale should be available to our industry by ensuring that the policy towards technology in Indian industry promotes the use of modern competitive techniques which alone can provide a favourable market for Indian goods abroad."

Both the chamber and the Engineering Export Promotion Council stress the need for proper transport and port facilities, regular supplies of inputs and a stable export policy. The engineering council also suggests "since 50 per cent of the exports in future are going to be in the field of capital goods and turnkey projects it is necessary that a separate export

import bank is set up to take care of finances needed for project exports and capital goods."

Finally, there are questions of the Government's attitude.

Will it be prepared to sanction the investment and the additional licensing to cope with a big increase in exports? Can a slow-growing, slow-moving country like India, chugging along at 3 or 4 per cent a year, hardly above the level of population increase, hope to compete with a flexible Japan or Korea? They are growing at 6 to 10 per cent and already have head starts in technology and export contacts.

Between 1961 and 1978, India's share of world exports fell from a mere 1.2 per cent in 1961 to a paltry 0.5 per cent in 1978. It will take a brave new world of decisions to hold India's position, let alone to reverse it.

**Kevin Rafferty**

## PROFILE: ADITYA VIKRAM BIRLA



**Aditya Birla: could not be fooled**

**ADITYA VIKRAM BIRLA** is one of the bright young men of the family. "If anything they are faster than we are."

He makes a comparison between India and South East Asia as regards Government clearance of new projects. "In Singapore, it is a few weeks; in Thailand, two to three months; in the Philippines, six to six months; in Indonesia, six to 12 months; and in India it takes two to three years.

"As far as finance is concerned, in South East Asia it takes one or two months, but in India it takes the banks five to six months and then the forms have to be sent to the Reserve Bank which takes another two to three months."

MIT taught him about chemical engineering and "gave me a sort of confidence that I could not be fooled on technical matters." But a similar young man starting off from a similar base would find it difficult because the plant uses the steam is generates. "One of the reasons for going to Thailand was because he could not get the plant in India where we have to put up with 15 years old technology and wasteful inefficient processes."

He still stands in admiration

of the older members of the family: "If anything they are faster than we are."

He makes a comparison between India and South East Asia as regards Government clearance of new projects. "In Singapore, it is a few weeks; in Thailand, two to three months; in the Philippines, six to six months; in Indonesia, six to 12 months; and in India it takes two to three years.

He claims that "by not allowing investment, India is importing unemployment. We are not allowed to expand in viscose staple fibre. So we are helping British employment by importing from Courtaulds."

He estimates that about 7 per cent of the business of the companies he is responsible for—which include Gwalior Rayon, Indian Rayon and Hindustan Gas—goes to foreign trade.

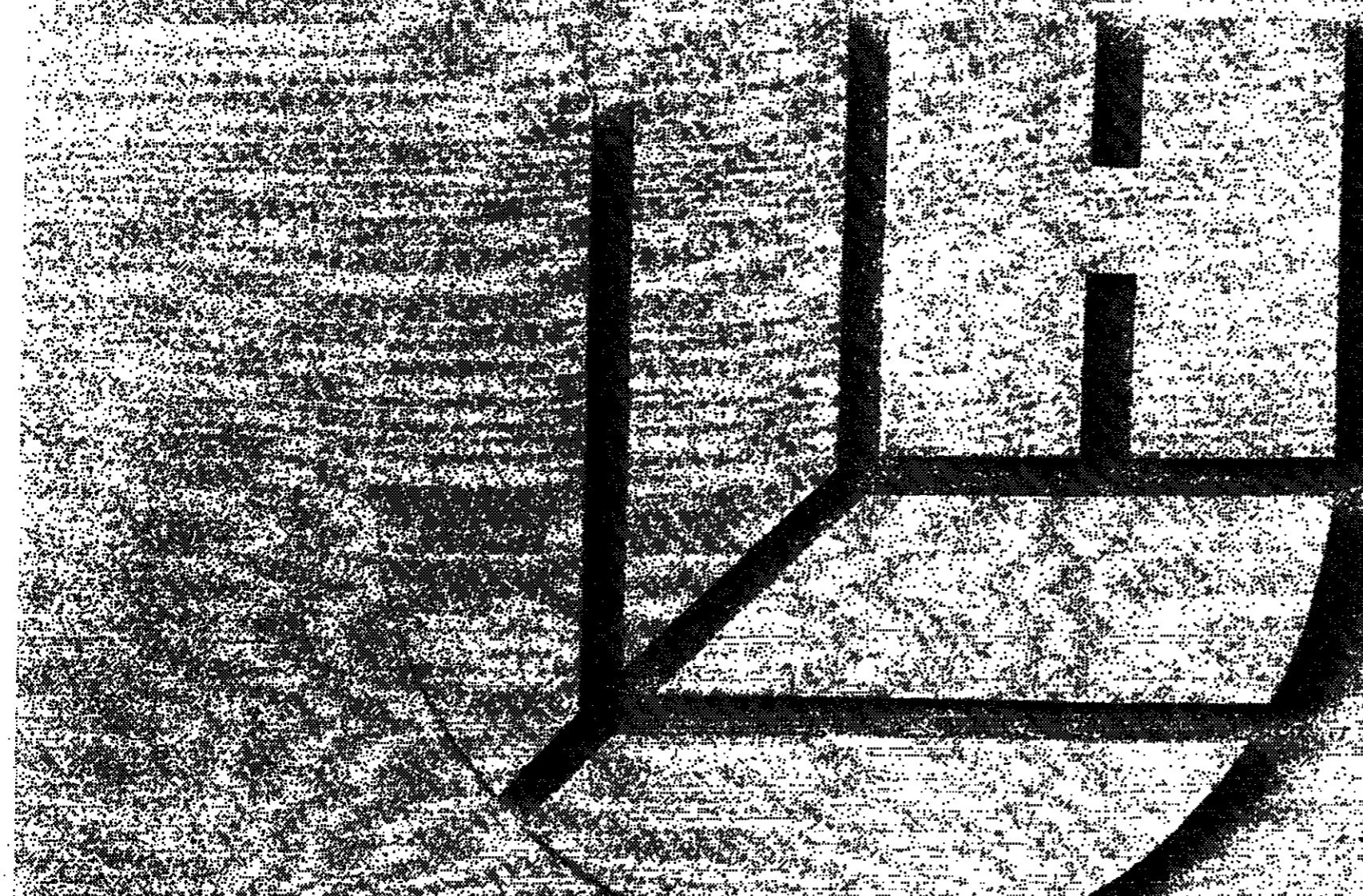
"There are very few cases where we export other than the surplus. There is duty protection all over Western Europe. And unless we have further investments it will be difficult for India to export, as the home market is growing. As it is the home market has been suppressed. There is no hire-purchase or anything like that in this country to make for easy payment and to boost the market. There is nothing like that: banks do not even give you loans on property."

Like many older captains of Indian industry, he has great hopes of Mrs. Indira Gandhi, who he says "has already appointed committees to sort

things out. She is a leader." But then he cites facts from Mrs. Gandhi's previous spell as Prime Minister to point out what is wrong with India: "During 1971 to 1976 we had 19 amendments to the constitution, 403 statutes, 97 ordinances, 30 regulations, 114 Presidential Acts for states under Presidential rule and 36,515 rules drafted, orders and notifications, many of them with implications for business. This is a country for the creation of rules, not effective government."

**Kevin Rafferty**

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**ank closer**

## TRADE

# "A major stake in India's future"

AN EXPERT GROUP, appointed by the Government, is working on India's export strategy and its goals in the 1980s. Two suggestions are under consideration.

First, India's share in world exports, which declined from 2.97 per cent in 1973 to 0.5 per cent in 1978, is to be lifted to 1 per cent. This involves raising India's exports from Rs. 57bn in 1978-79 to Rs 350bn in 1990-91. It amounts to an annual rate of growth of 18 per cent in exports.

Second, India's share is to be raised marginally from the present 0.5 per cent to 0.6 per cent in 1990-91 (12 per cent annual rate of growth).

In absolute terms, India's exports in 1990-91 would be Rs 250bn.

Financing exports in the 1980s, according to the thinking in the Government, calls for a two-pronged attack. Taking first the more difficult task of exporting non-traditional items, a strategy has to be evolved to create the necessary infrastructure to handle the magnitude of exports envisaged.

The Engineering Export Promotion Council, a Government-sponsored organisation, has projected engineering goods exports to rise from Rs. 10bn (Rs 549m) in 1980-81 (April-March) to Rs. 93.9bn in 1990-91—a nine-fold rise in ten years. On the basis of a modest Rs. 250bn target for exports in 1990-91, the share of engineering goods works out to 37.56 per cent.

Apart from the consumer goods, whose export is handled by normal banking channels through letters of credit, capital goods and turnkey projects are expected to contribute to the export effort in a big way. Their exports are slated to rise from around Rs 5bn in 1980-81 to Rs. 46.45bn in 1990-91. Capital goods will thus maintain a 50 per cent share in total engineering goods exports.

Against a negligible amount of Rs. 50m in 1955-56, engineering goods exports were worth Rs. 8.85bn in 1978-79 and by the turn of the current decade were expected to touch Rs. 93.9bn. However, India's share in the world export of engineering goods remains low at 0.21 per cent.

As the developing countries, who are the major importers of

## INDIAN TRADE WITH SELECTED COUNTRIES

	Exports (U.S. \$m)	Imports (U.S. \$m)
France	1970 24.5 269.0	1970 23.1 309.0
Germany	44.7 346.3	1970 135.4 762.6
Iran	34.8 113.5	1970 111.6 541.3
Iraq	12.4 45.1	1970 5.1 34.4
Japan	281.3 726.4	1970 97.0 310.8
Saudi Arabia	20.5 110.3	1970 23.1 342.3
UK	234.7 562.7	1970 149.3 739.9
U.S.	274.2 981.4	1970 614.0 1,042.6
USSR	271.5 517.6	1970 271.5 207.5
Others	325.8 3,414.3	1970 674.5 3,542.0
Total	2,024.4 7,091.9	1970 2,094.6 8,333.4
India's % of world trade	0.72 0.63	0.78 0.65

capital goods, are likely to ask for credit terms, sales on credit may account for 30 per cent of the total value of such exports. The normal practice is that the cash component of these exports is 20 per cent and deferred payment arrangements are allowed up to 80 per cent.

On that basis the quantum at credit is likely to increase from Rs. 1.2bn in 1980-81 to Rs 11.16 in 1990-91. Besides, exporters of capital goods are required to furnish guarantees for advance payment and performance aggregating 30 per cent of the value of the capital goods exports. These guarantees are required to be given in the case of all exports of capital goods whether or not on credit. Non-borrowing facilities by way of guarantees will progressively increase from Rs 1.50bn to Rs 13.95bn by the end of the pre-bid stage.

The IDBI already operates quite a few schemes to facilitate capital goods exports. It refinances term export credits granted by banks. The bank extends finance to borrowers in participation with banks. It has a scheme to extend direct credits to foreign buyers or institutions.

IDBI participates in extending pre-shipment finance with banks for manufacturing high value equipment with a manufacturing cycle of more than six months. Normally, pre-shipment credit up to 180 days is provided by banks.

Despite the availability of these schemes, the capability of IDBI to handle engineering goods exports of more than Rs 93bn in 1990-91 is doubtful.

The Government is exploring the possibilities to promote exports of capital goods to African and Latin American countries, which are already borrowers of Euro-currencies.

R. C. Murthy

## Packages

The credit budget of India's financial institutions is sought to be reduced by tying up credits given by OPEC countries whose aid is untied, to developing countries. For instance, in 1977, the aid was over \$5.5bn. The equipment packages from India can be married to the OPEC flows to promote project exports. Also, there is the other source of private capital flows in the form of Euro-currency loans.

The Government is exploring the possibilities to promote exports of capital goods to African and Latin American countries, which are already borrowers of Euro-currencies. The Government is exploring the possibilities to promote exports of capital goods to African and Latin American countries, which are already borrowers of Euro-currencies.

R. C. Murthy

## Government under pressure as import bill soars

### IMPORTS FOR SELECTED COMMODITY GROUPS

	(monthly average Rs m)			
Cereal and cereal products	1974 636.5	1975 1,118.9	1976 732.1	1977 1,020.0
Textile fibres	55.9	60.8	169.5	355.9
Petroleum and petroleum products	984.1	1,621.4	1,176.7	1,292.7
Chemical elements and compounds	155.2	150.2	114.5	162.0
Fertilisers (manufactured)	363.5	391.2	164.8	212.5
Iron and steel	353.1	258.9	183.1	216.3
Non-ferrous metals	148.9	233.7	132.2	155.4
Machinery and transport	579.8	778.7	815.9	933.4
of which:				
Machinery other than electric	336.3	480.5	548.9	587.4
Electrical machinery	134.1	167.3	144.1	105.8
Transport equipment	109.3	130.9	122.8	193.4
Total imports	3,765.6	4,387.3	4,379.3	5,821.7

Some relief would be provided if India could get industry moving and curb the imports of steel, cement and aluminium, some of which India was exporting two years ago. Fertiliser imports could also be reduced and this would provide an all-round boost to the rise...

It is a testing time. With India importing more than 60 per cent of its oil needs, half of its export earnings are immediately spent. From this the economic choice is almost between a crisis tomorrow and a crisis next week: if the Government does not re-examine and restrict imports, it may find its foreign exchange reserves quickly eaten up; if it protects the reserves by restricting imports it may be tying its hands for the future and become trapped in the worst consequences of import substitution.

While India's exports have remained sluggish the country's import boom has continued and the slight trade surplus of 1976-77 has grown into a huge and threatening gap.

Merely by looking quickly at the figures it is tempting to suggest that oil imports should be cut—a thought that is reinforced by the sight of traffic jams in the main Indian cities wrought in exhaust smoke.

## Common sight

But the scope for reducing oil consumption is limited. Petrol accounts for slightly more than 5 per cent of total oil products consumption. It is a common sight to see Indians economising by fitting four people on to a motor scooter or motorcycle and squeezing up to 10 or more into a car.

In industry there are inefficiencies in the use of oil because of old plant, but the best boost to the use of oil in the economy would be to get the infrastructure sorted out and the power supply and industry running normally so that wasteful use of diesel in private generators and in carrying coal across India could be cut out. And in the longer-term the search for alternative sources of energy is the only sure way to curb the oil bill. But that does not solve the immediately pressing problems.

All in all, India imports little more than what is barely

needed to keep the economy steadily moving. Policies of import substitution pursued over the years have brought their dangers.

Given the high level of foreign exchange reserves available to the previous government, the trade gap plus earnings from tourism and remittances from Indians working abroad, the Janata Government had begun to liberalise its import policy. Whether "liberalisation" is really the correct term is open to dispute. Foreign economists have referred to its as "de-bottlenecking".

In the case of sugar the fluctuations in the size of the crop are not caused simply by changes in the weather but by the complex interplay of the whole panoply of Government controls, support prices, fixed prices, hoarding and speculation.

But the area where imports have grown most startlingly is in edible oils. As India has increased food production and removed the need for food grain imports, so edible oil imports have risen. This year they may go up to 1.3m tonnes and the cost to Rs 10bn (Rs 549m) which may make edible oils the most expensive item after oil.

Most economists expect that edible oil imports can only rise, even if India steps up its own production. Though Indian per capita consumption of edible oil has risen from 3.5 kilograms a year in 1973 to 5.5 kilograms in 1977, it is still a long way below the internationally accepted standard of 22 kilograms.

It is tempting to urge that a breath of fresh air would be good for India and that further liberalisation would sharpen efficiency and impel exports. But it would also have tremendous implications for the vast spider's web of controls and vested interests, from politicians to officials to businessmen with their own strategic interests to protect. The best that can be hoped is that the shutters are not firmly pulled down.

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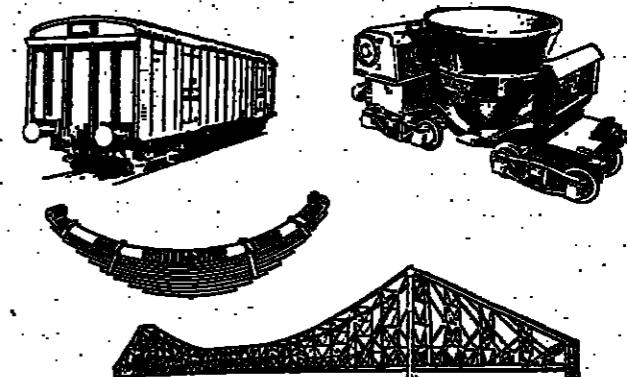
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Financial Times Monday March 17 1980

## Internal trading scene forms complex web

TRADE TRANSACTIONS inside India in 1978 accounted for Rs1233bn (£7.3bn), or roughly 12 per cent of the net domestic product. This shows the immense amount of activity concentrated in catering to the needs of the country's estimated 650m population and also the substantial part devoted to what are strictly non-productive areas. Internal trade is difficult to monitor.

Largely because of the size of the country and the locations of the bulk of the population in its 1m villages, the Government has found it impossible to keep track of the innumerable retail traders, the smallest unit of which is probably just a basket balanced on a village woman's head.

Yet most towns, districts and smaller administrative units have organised markets through which the complex process of marketing industrial and agricultural products is going through. From the stockists to the wholesale markets known as "mandis" scattered all over the trading community, has created a web of its own. It operates in a freely competitive manner that is hard to find a parallel for in any other part of the world.

### Methods

Its representatives do not reveal the extent or methods of their operations fully and so they are the target of politicians when prices rise, as they are doing now.

The trading community itself considers itself a scapegoat and possibly this is true. It is easy to talk, as politicians and officials do, of "black marketeers" and "hoarders" at a time of scarcity such as when the monsoon fails and prices automatically rise. The traders themselves blame low production for the situation, and not wrongly. But it is equally true that their operations, or a substantial part of them, are conducted furtively and with the object of cashing in on a difficult situation.

That there is a thriving black market in India for such scarce items as cement and steel or what the authorities call essen-

tial commodities is borne out by the fact that stringent statutory countermeasures have had to be resorted to. That such operations exist on a massive scale is borne out by the fact that, during the disciplining days of Mrs. Gandhi's emergency, "black money" (as money not declared for tax purposes is called) worth as much as Rs 15bn (£20m) came into the open under a voluntary disclosure scheme.

The "black money" operates widely to finance illegal commercial operation and is a major cause of the scarcities and rise in prices in India. Since the days of the emergency, it is thought to have accumulated again and is now virulently at work. This is one reason why the caretaker regime of Mr. Charan Singh during the later part of 1979 thought it necessary to introduce the much-hated preventive detention through an ordinance.

This measure, called the Blackmarketing and Maintenance of Essential Commodities Ordinance, has been formally enacted by Mrs. Gandhi and preventive detention is back on the statute book. There was only national opposition to it from Mrs. Gandhi's opponents since it was initially brought in by them. This underlines the need to regulate and regularise the channels of trade, the bulk of which remains in private hands.

It has long been the aim of the Government to introduce a countrywide distribution scheme through a system of "fair price" shops. This really means Government controls and a kind of rationing with which private trade is always being threatened but which it manages somehow to prevent being introduced.

The Janata Government's "product-cum-distribution" system, formulated after innumerable official committees made countless recommendations, never really got going. Mrs. Gandhi has also spoken of the need for some such scheme but the task of rusting the private trader is complex and almost impossible. Officials concede that the scheme will have to be limited to major urban objects is to establish at least

giving incentive prices to farmers, introducing suitable monetary and credit policies, restructuring the import and export policies (for instance by imposing a ban on export of items that threaten to become scarce in the country), preventing speculation and hoarding largely through legislation (something that has not worked), and the removal of transport bottlenecks and strengthening of public distribution system.

The production-cum-distribution scheme for selected items has not got off the ground except in a small way, even though it has been approved by the National Development Council which is the country's supreme economic decision-making body. One of its main

objectives is to establish at least

K. K. Sharma

## Exports growth aided by promotion programme

IMPROVED EXPORTS of manufactured goods are now vital to India's economy, and fortunately there appears to be a growing market in the major industrialised countries for inexpensive engineering products.

This is because many of them have low added value and require high labour input, and are therefore barely profitable to produce in Europe and the United States. The list of goods of this kind successfully produced and exported from India is growing rapidly.

They include scientific instruments, castings and forgings, builders' hardware, bicycles and components, parts, hand tools, industrial fasteners, electronic components, machine tools, and diesel engines.

These products are produced by a dynamic and expanding engineering sector, made up of 125,000 manufacturing units (almost exclusively small private companies) which employ nearly 25 per cent of the country's manufacturing labour force. The sector has an

annual output of more than £5.6bn and its exports are likely to be worth nearly £600m this year, with a predicted annual growth rate of 25 per cent.

This growth has been accompanied, and obviously assisted, by an intensive export promotion programme, funded largely by the Swedish International Development Authority and the International Trade Centre, a GATT/Unctad organisation.

A number of exhibitions have been held in the United States, Denmark, West Germany, the United Kingdom, and the biggest yet is to be held in Rotterdam in May. For the first time the whole Indian engineering industry will be represented, including the heavy sector and companies able to handle whole projects. The fair is to be funded largely by the Dutch Government, and there are plans for a similar exhibition in Canada next year, for which aid will also be provided.

Dr. I. P. Singh, Acting High Commissioner of India to the UK, said recently at the opening of the Birmingham fair that

the Brandt Commission report had made it clear that the industrialised world now had little option but to trade freely with Third World countries since it was in both their interests.

He praised the role of the Trade Development Authority of India for its active promotion of Indian manufactured goods, which must be exported in increasing volume and value if the country is to maintain its recently liberalised import policy.

But it is clear that individual buyers in Western countries do not purchase these goods for any other reason than their price and quality, since there is abundant competition from other countries such as Taiwan, South Korea, and others.

One of the most successfully exported products are electronic components, now worth well over £20m a year and rising.

In the higher technology range of products there has been considerable success, with exports of machine tools rising to around more than £10m in value out of a total production level of about £57m in 1977-78. India also manufactures

nearly 30 per cent of the world's diesel engines in the lower horsepower range. With current production in excess of 300,000 units a year from more than 300 factories, it is an important industrial activity. Exports of diesel engines were valued at £9m in 1977-78 and engine parts at £12m.

Improved quality

But one of the major constraints on manufacturing industry is lack of capital and new technology, which companies from developed countries can readily provide. The Indian Government hopes that trade fairs will allow companies to see the improved quality of Indian goods and thereby encourage joint ventures.

According to the Indian Investment Centre, an international advisory body funded by the Indian Government, about 50 joint venture agreements are signed each year, differing according to the nature of the project.

Some are set up with the main object of exporting the product, usually through the foreign participant, while others are based on domestic demand, although there is usually some provision for exports.

The Investment Centre, with offices in London, New York, Tokyo and Dusseldorf, is one link in a chain of authorities working to provide India's growing industrial capacity with outlets in the developed world.

Lorne Barling

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Statement of Condition		U.S. Dollars (in millions)
PARTICULARS	1977	1978
1. Paid-up Capital	3,713	3,713
2. Share Funds	8,045	10,768
3. Deposits & Other Accounts	106,527	132,002
4. Advances (excluding bills)	83,322	83,419
5. Investments	21,404	37,231
6. Working Funds	22,449	44,473
7. Total Income	132,357	162,219
8. Total Expenditure	57,041	115,543
9. Net Profit	16,949	112,945
10. Assets transferred to Central Government	8,233	8,235
Number of Branches	944	1005
Number of Employees	17,551	22,334

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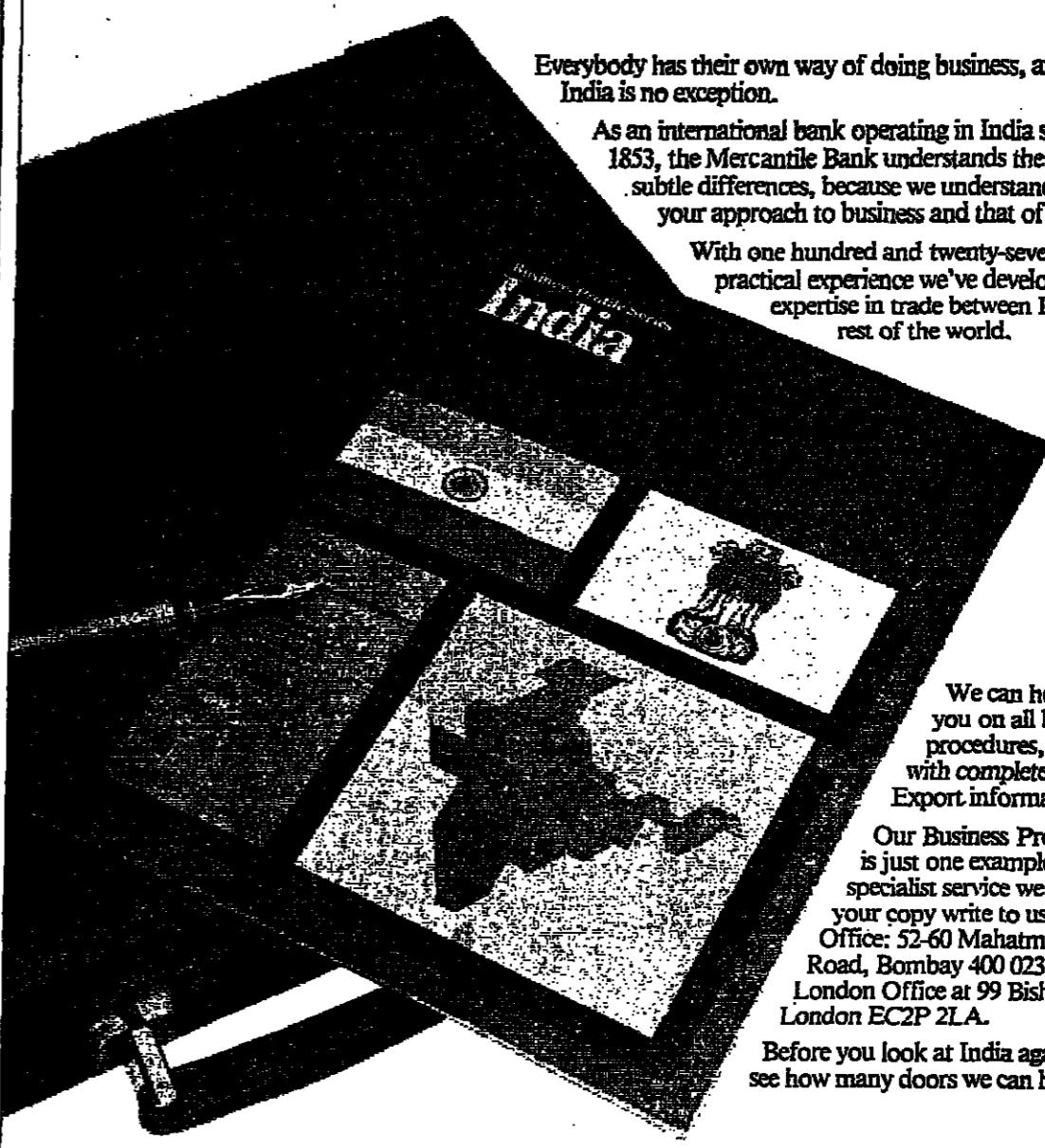
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## TRADE

# Time for fresh view of foreign investment

FOREIGN INVESTMENT is nowhere near the top of anyone's list of priorities for moving the Indian economy into top gear. But there is a growing and influential number of people who believe that better incentives for investment might be a part of a competitive package to stimulate and open up the economy.

Now would be a good time for a fresh look. The massive task of revising the structure of foreign capital under the Foreign Exchange Regulation Act (Fera) is nearing completion. Under this Act big foreign groups have had to reduce their Indian holdings to less than 40 per cent unless they can prove a special case, like being in a key technological sector or big exporters.

Restructuring has sometimes been painful, but the rationale of the Act was that India had no need for foreign domination of consumer industries—which was a throwback to the days of the British Raj.

For India it is a matter of pride that it is the tenth largest industrial power in the world. The country can make hosts of items from basic consumer needs to textiles to heavy and sophisticated engineering goods to computers to ocean-going ships, so there is an attitude of: "Why do we need these foreigners to come and tell us how to make things? After all we only got rid of them 32 years ago and do not want them coming back now by the back door of economic colonialism."

Even giants such as IBM and Coca-Cola closed their businesses in India. IBM was not prepared to dilute and Coca-Cola was not prepared to divulge the magic formula for making its drink. India let them go. There is still a lot of foreign capital in India, with Britain in the lead with an estimated £350m. There is also a feeling that foreign know-how might prove a shot in the arm for a struggling economy. But there are also a lot of old antagonisms to be conquered first.

Perhaps, not surprisingly, commercial attachés in Bombay and Delhi are looking more closely at prospects for collaboration agreements and exchanges of technology rather than direct investment.

Even with this overall picture of slowness and red tape there are still people who believe that India deserves consideration as a worthwhile place for foreign investment, and there are others who believe that with the new Government of Mrs. Indira Gandhi the climate may change and potential investors find a more welcome door.

Dr. F. A. Mehta, the economics director of Tata, said: "For the foreign company there are several questions. Is the product he is making of such a technological type that he can convince the Government of the need for a major holding. If so, then irrespective of the pressures and the delays, he will have something that he can sell." In today's India, new high-technology products that will assist agricultural growth or benefit power or transport are obviously attractive.

Thus an article last year in the respected Economic and Political Weekly blamed foreign economic powers of working hand-in-glove with the big Indian industrial houses: "With an eye to quick profits and control over the labour process, monopoly capital which was already well-entrenched, found contemporary Western technology much too attractive. India has its size and in spite

of the low growth there is plenty of skilled manpower.

"Then there is the political question. This is not a question the economist can answer, but in corporate boards round the world there is a good deal of turmoil at what is going on in countries previously considered stable. I am reminded of the statement by Trotsky 'Banish the word stability from the dictionary of the 20th century.' The media does not offer much help in being able to predict trouble. As far as India is concerned it has its political problems, but still it goes on."

Another leading businessman, Mr M. S. Patwardhan, managing director of National Organic Chemical Industries and president-elect of the Bombay Chamber of Commerce, also believes that for some companies it may be better to be in India.

"If you have a lot of dealings with India it may be more comfortable to be manufacturing with an Indian partner. If you are on the outside and have to send a man put him in the Taj Hotel, it can get expensive, he gets lonely, does not know his way around and does not do the best job."

"Selling technology is all right, but there is no real joy in the sale of technology. A businessman wants a piece of the action."

Both Dr Mehta and Mr Patwardhan believe that a presence in India is a real asset. Knowing the right people helps enormously in the time-consuming business of what Dr Mehta calls "corridoring"—meeting Government officials. Some businessmen have calculated that in India they spend 45 per cent of their time dealing with officials, whereas in Germany a similar businessman would spend only 10 to 15 per cent of his time with Government.

Both men say that companies already in India have proved the benefits of an Indian base and both cite Fera not as a time of disinvestment, but as a time of opportunity. Companies which knew how to use the Act, especially Hindustan Lever, ICI and ITC (formerly Imperial Tobacco), were able to expand into areas they would not have dreamed of before. Faced with the prospect of disinvestment and an outflow of foreign exchange, the Government was delighted to see expansion as a way of reducing the foreign shareholding.

DR. F. A. MEHTA says: "If I had eight years running this country, India would be importing labour, not exporting it to the Middle East and elsewhere." If that is a startling statement, he has an even more ominous warning: "At the rate things are going Indians will be eating into each other's entrails in the fight to get jobs, houses, food, because of the lack of economic growth."

As he is economics director of Tata Sons, one of India's top two industrial houses, it may not be surprising that Dr. Mehta's views diverge from those of government.

"This country has chained

itself. Think small, be small, eternally remain small that is the motto. Indian economists are disciplined to think this small (he makes a gesture as if taking a pinch of snuff) until of course it comes to their UN

jobs."

It is not just the officials who

excite his wrath. He clearly

sees a conspiracy involving

businessmen as well as officials

and politicians. "Let us suppose that Bally wants to come to India to invest in shoemaking with an Indian partner. If I were a rascal I'd also go abroad and seek the help of the enemy of Bally to persuade it to come to India and help me make shoes."

Dr. Mehta adds: "There is

not a lot of lip service to socialism.

But I am the true socialist. Let

India make 250m pairs of shoes

a year, not a mere 65m, so that

every adult can have at least

a pair a year. I want to bring a

television set into every home.

Why should the rich be the

privileged ones?"

Taking example, he says: "A few years ago, a friend ventured the

opinion that by 1982 India

should be making 300,000 tele-

vision sets. His lips were

quivering at the enormous

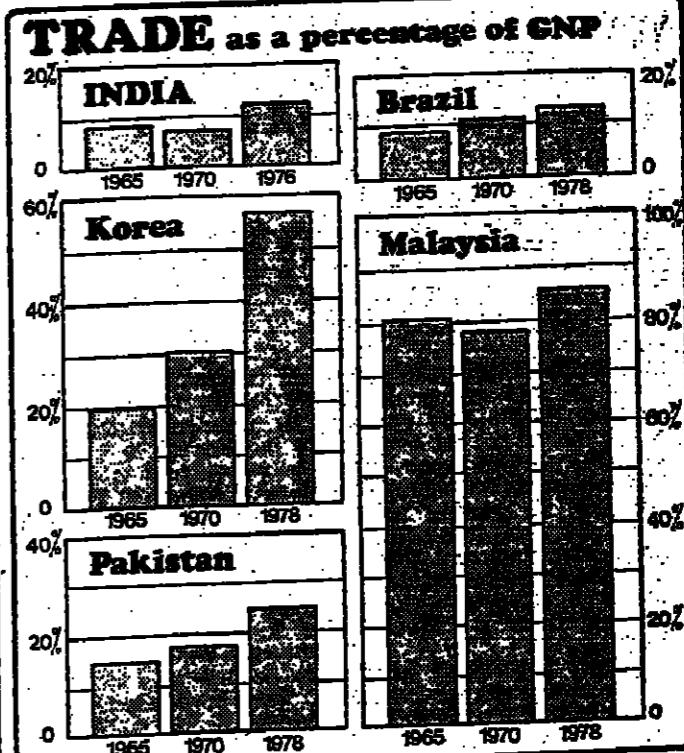
figure. I startled him by saying

that by 1982 India should aim

at 15m sets a year."

"Look at the jobs that could

be created: 2 to 2.5m in the



## PROFILE: Dr. F. A. MEHTA

# Apostle of rapid growth

Dr. F. A. Mehta factories making the sets: 1.5 to 2m in selling them: 1 to 1.5m in repairing them: probably another 300,000 in manufacturing the film to show on them: more jobs in making the programmes: and extra income to create even more jobs.

Instead what happens: it is decided that a TV set is a luxury. There is the cascade effect of heavy taxes. Then 40 entrepreneurs are licensed, a number reduced to 28 as the diseconomies of scale bite and force some out of business. By the time the set is finished the intellectual target is reached: the TV set is a luxury which only the very rich can afford.

And far better for the Government to take 5 per cent tax each on 9m television sets—the rest would go to export—the rest would go to 65 per cent tax on 300,000. For good measure adds that tiny Taiwan has almost reached production of 15m television sets a year.

He provides a couple more examples of the lumbering, slumbering Indian economy by reference to Singapore: "In Singapore almost all tax-drivers have colour television in their home. In Jurong a 1.5-ton air conditioner costs the equivalent of Rs 2,800; in India, such are the diseconomies of small production the same air-condi-

tioner costs Rs 12,600.

"The answer is to go for rapid economic growth of eight to ten per cent, and to plant redistribution mechanisms that do not impair savings or investment. I am not advocating a Brazilian pattern."

But thanks to the baneful influence of dismal economic schools of Oxford, Cambridge and LSE, though Dr. Mehta is a product of LSE, India "this rich country" continues to take the low road. And Dr. Mehta stays in India in spite of being offered jobs in three other countries as economic adviser to government.

Kevin Rafferty

Kevin Rafferty

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# Calcutta: a great need for huge investment

**CALCUTTA**, THE Manchester of India, is suffering from a number of economic ills, many of them similar to those felt in Britain's industrial north-east.

In spite of a sustained and steady decline from its once-unchallenged position as the industrial metropolis of the Indian subcontinent, business seem to have a confidence about the future that is probably based on the assumption that things cannot get worse.

Calcutta and its industrial hinterland nevertheless stand more to gain from the country's new liberal trading policy than almost anywhere else in India. Fresh investment is needed on a grand scale and West Bengal's Marxist government is so keen to dispense economic medicine that foreign companies and foreign capital could play a large part.

Most people know Calcutta for its terrible poverty and horrendous overcrowding. It is easy to forget that during the halcyon days of British colonialism, Calcutta was capital of India and the generator of wealth and industry for the whole subcontinent. While its port handled the lucrative trade in tea and jute, large-scale industries, particularly in steel and heavy engineering, grew up around the considerable coal and iron ore deposits of West Bengal and neighbouring Bihar.

It was a city built for 14m, so it remains. As its industries have run into trouble, so the extremes of Victorian squalor and poverty remain a commonplace for the teeming millions populating the city.

It was a city built for 14m, but the sprawling metropolitan area covering 240 sq miles along the Hooghly River now holds a population of 13m. The narrow streets are choked with the homeless, the hawkers, beggars, cows and many dogs.

In their midst, huge rubbish tips spread along what once

were pavements, spilling over into milky gurgling pools that house the city's standpipes—the only source of water for most people living in the city.

An estimated 100,000 dilapidated taxis weave around the lumbering trams, leaving the man-pulled rickshaws and coolies with handcars to fend for their lives and livelihoods as best they can.

To make matters worse, a Russian-designed underground railway intended eventually to link Dum-Dum airport in the north with southern Calcutta, is now starting to cut through the very heart of the city, a trench 30 yards wide eating through the densely populated business centre. It is unlikely to be finished for a decade yet, and the chaos it will cause is unfathomable.

## Rising cost

While Calcutta has relinquished its position as the foremost industrial centre in India—Bombay and its hinterland overtook it in the early 1960s—it is still a powerful commercial force. Behind only Maharashtra, West Bengal offers twice as much factory employment as any other state. Its port, handling almost 8m tons a year, is the country's biggest behind Bombay.

It is still the home of tea and jute industries. While trade in these commodities has been flat in recent years, there are signs that business is bucking up. The relentlessly rising cost of synthetic fibres, closely linked to oil prices, has given jute products a new lease of life. Demand for tea has spurted, both at home and abroad. Some tea traders now say domestic demand is growing so fast that exports are being squeezed as production cannot be raised fast enough.

With strikes at an all-time high in 1978—for example, the port was strikebound for about 150 days, at a cost of 100,000 man-days—output has been hit hard. The power stations have produced an average of 25 per cent of their total capacity, leaving many industries without power for between six and ten hours a day.

1943, Japanese annexation of Burma cut off north east India from its granary. Facing widespread famine, millions flooded to Calcutta. Then with the partition of India in 1947, the new Moslem state of East Pakistan now Bangladesh.

At the same time, the jute industry was spliced, with factories in West Bengal cut off from their sources of the raw commodity. It has taken many years to recover from this blow.

Two wars with Pakistan have disrupted this frontier state and created fresh floods of refugees. A strange paradox resulting from these successive influxes is that Bengalis make up a minority in their own capital, with just 35 per cent of the population.

Industry was also severely hit by the widespread industrial sabotage associated with the Naxalite uprisings a decade ago in the midst of industrial chaos and political turmoil, many industrial and commercial houses fled. By and large, their factories remained, but headquarters were moved to Bombay along with the lion's share of subsequent investment.

Reflecting this decline, unemployment probably stands around 6m in Bengal. The state boasts more "sick" industries than any other state—that is, companies unable to pay dividends or no longer entitled to draw credit from the banks. Bengal has around 80 "sick" large industrial units—more than 20 per cent of the country's total.

Aggravating the situation still further, the state has lived through a decade of terrible labour trouble, particularly in the core industries of coal and power. As output from these industries has been hit, so all other industries have suffered.

With strikes at an all-time high in 1978—for example, the port was strikebound for about

150 days, at a cost of 100,000 man-days—output has been hit hard. The power stations have produced an average of 25 per cent of their total capacity, leaving many industries without power for between six and ten hours a day.

Both government and business spokesmen admit that declining output is also due to the inadequacies of aged and ailing plant. Like Britain's industrial north east, Calcutta is saddled with ageing industries and outmoded, inefficient technologies. Huge amounts of fresh investment are urgently needed.

This is well illustrated in Calcutta's port, which is separated from the sea by 86 miles of "bars, bores and bends" along the Hooghly river. Wharves, warehouses and loading methods still date back to the 19th century. Recognising this, the Government has built a new port downriver at Haldia. After three years in operation, with a container terminal and an oil jetty, Haldia is using just a fraction of its capacity, because the road and rail network linking it with Calcutta and the region needs extensive improvement.

West Bengal's Marxist government, acknowledging these needs, seems keen to provide new opportunities for domestic and foreign investors. India's more liberal import policy offers improved prospects for foreign companies, particularly in the coal machinery and power sectors. New opportunities for foreign investment have been recognised by international bankers, like Lazards and Kleinwort Benson, who have been busy recently assessing prospects according to diplomats in Calcutta.

When the Marxists first came to power in West Bengal in the late 1960s, they aroused alarm throughout the business community. But that apprehension has been doused by what one diplomat called "totally responsible" government. A foreign businessman assured that the



Calcutta street scene: the extremes of Victorian poverty remain commonplace

government of Mr. Jyoti Basu which won back power in 1977, had done its best to create a "milieu of tranquillity" for business to work in.

Explaining the paradox, Finance Minister Dr. Ashok Mitra claims that revolutionary policies would only be possible if the communists won power in Delhi. In the meanwhile, aiming to consolidate power in West Bengal by showing they can offer more effective government than any other party, the Marxists see higher investment and raised industrial activity as the only means of reducing unemployment and ameliorating poverty.

Jyoti Basu's government has impressed businessmen with the

way it has set about improving labour relations. One foreign businessman confessed that the unions in driving a hard bargain in wage negotiations, but once a deal was signed it was proving effective in persuading workers to get back down to work until the next wage round was due. It is indicators like this that have generated a new, if cautious optimism among businessmen in Calcutta.

## Hard bargain

Mrs. Indira Gandhi's victory in January's general elections has nevertheless created new uncertainties. West Bengal was almost alone in rebuking Mrs.

Gandhi's Congress party. As the rest of the country has fallen into her power, so one independent observer anticipates that there will be an unlikely showdown sooner or later between Mrs. Gandhi and the Communists (in West Bengal). One diplomat felt "a freak and dangerous situation at the moment."

It is rumoured that 10,000 Communist Party cadres have already been sent underground and that a second rank of party leaders has been selected in anticipation of the current leadership being arrested and jailed.

In theory, businessmen should be keen to see Mrs. Gandhi resume power in West Bengal. In

fact, few relish the prospect. Not only do they feel they have at last reached an effective working relationship with the Marxist government, but they also have no love for the Congress party, which has traditionally played a disruptive and irresponsible role in the region.

So, like those states in India

now languishing under President's Rule, Calcutta awaits Mrs.

Gandhi's next move. Most feel

that if she leaves the Marxist government alone, then the region can look forward to better days ahead. If she chooses to be vengeful, then chaos is inevitable, and Calcutta's economic decline will continue unchecked.

David Dodwell

# Bombay bursting at the seams

**BOMBAY**, gateway to India for traders since the 18th century, is a city bursting at the seams. Its ageing port can no longer cope with the volume of trade needing to pass through it, while the city, trapped by the sea on the peninsula where it was first established, can barely provide the most basic amenities for its burgeoning population.

At the undisputed hub of Indian commerce, and at the centre of the country's fast-growing industrial heartland, one would expect to find businessmen brimming with confidence—particularly following the victory of Mrs. Indira Gandhi's Congress Party in the recent general elections. It is widely believed that Mrs. Gandhi's government will be sympathetic to big business.

Instead, one hears complaints that the cost of living—particularly the cost of housing—has soared, that industrial unrest is on the rise, that crime is increasing, and that basic public services are deteriorating as the city becomes too unwieldy.

Garbage piles up even in the smartest residential areas. Power cuts are an everyday occurrence. Even the grandest buildings seem to have seen better days. There are now an estimated 580 slums in the city, while a huge population lives in squalor on the pavements.

Bombay is almost completely a creation of British colonialism. Ceded to the Portuguese by the Sultan of Gujarat in the early 16th century, it came into British hands as part of the dowry given to King Charles II when he married Catherine of Braganza in 1665. Bombay was then a series of small islands; but the British joined them up by land reclamation, then set up a fort and a trading post.

## Sabotage

The city was soon one of Asia's biggest sea ports, getting a big boost in 1688 when the Suez Canal was opened. A huge textile industry grew up around the city, while the hinterland, now the state of Maharashtra, a host of new industries has mushroomed, such as chemicals, pharmaceuticals and heavy engineering.

Manufacturing industry in the area has received several recent boosts. First, over a decade ago, an outbreak of industrial sabotage in the north east of India led by the Naxalites prompted a flight of investment away from Calcutta and West Bengal over to the west of the country.

Second, Bombay found itself perfectly placed to plug into the oil-based prosperity of the Middle East. Finally, the discovery of oil offshore catalysed the rapid growth of industries based on petrochemicals, and involved in the manufacture of products like "fertiliser" and cement.

The pre-eminence of Bombay and Maharashtra in Indian industry are easily illustrated. The state provides 18 per cent of the country's factory employment and has almost 18 per cent of the nation's invested capital. It provides a quarter of the gross output and a quarter of the added value of Indian industry.

Bombay alone pays 32 per cent of the country's income tax, and 50 per cent of all central excise duties.

The headquarters of all domestic banks—including the Reserve Bank of India—and of most foreign banks have now settled in Bombay. Many, like the Mercantile Bank and the Chartered Bank, have recently shifted headquarters from Calcutta in recognition of Bombay's position as the country's commercial capital.

While the city's backbone industry—textiles—has had a lean time in recent years, both because of a depressed world market and because of mounting need to replace antiquated machinery and factory methods, other industries have grown rapidly.

This includes chemicals, pharmaceutical giants like Pfizer, Glaxo and May and Baker, heavy engineers like Larsen and Toubro, and electronics in the new SEEP Zone. A substantial construction industry has mushroomed under the stimulus of business in the Gulf states.

Even companies with most of their operations far from Bombay tend to establish their headquarters there. Tata Engineering and Locomotive Company (TELCO), for example, with its operations in Bihar, and the giant Birla group with factories all over India, have headquarters in Bombay.

Mounting physical congestion in Bombay itself has forced industries to set up operations further and further from the metropolis. A dense industrial belt now stretches south west all the way to Poona. It is not only Bombay's favourable geographical location and its leading role as a port-handling 15m tons of cargo a year—that has attracted investment. It has established a reputation for high entrepreneurial skill and responsiveness to new industrial investment, and has a large reservoir of skilled workers.

More than 30 per cent of foreign investment in India is focused on Bombay and its hinterland, though foreign investments make up only a tiny part of total investment in the area.

For all the industrial growth seen over the past decade, industrialists seem to feel things could have been better. They have been dogged by a "economic drift" during the past three years of indecisive Janata rule. Dissolution of the state government and imposition of President's Rule by Mrs. Gandhi just a month ago means they must live with uncertainty for several months to come.

Many industrialists appear nostalgic for the "first rule" of Mrs. Gandhi's emergency period, which effectively eliminated most labour disputes and helped them to reap high returns from improved output levels.

Rising costs, particularly for property, are heartily resented. Mr. Pandit claims: "No one who earns his living honestly can afford to buy his own home unless he is prepared to live far from the city." With pro-

perty prices around Rs 500 per square foot in the middle of Bombay, even Rs 600,000 will only buy a two-bedroomed flat. Many are forced to live 20 and 30 miles out of Bombay.

As a result, traffic congestion on the single spinal road to the business centre at the south of the peninsula is appalling. Queues rarely clear before 8.30 in the evening. The commuter day and so congested that commuters are now catching the empty outgoing trains in the morning as the only way of getting a place when they turn round and travel back to the city from the northern terminal.

## Huge exodus

The population of greater Bombay has been growing at a rate of 40 per cent a decade since 1950. From fewer than 3m, the population is now close to 8m. Most of this population lives in abject squalor and poverty. A huge number live under sacking along the pavements in conditions akin to those in refugee camps on the Thailand border with Kampuchea. Few have any hope of permanent employment.

While these people suffer, so the wealthy feel they are suffering too, mainly because of a huge exodus of workers to the Middle East. These people would once upon a time have been eager to earn a living as servants, but the exodus means that servants are increasingly difficult to get. So too are craftsmen like carpenters, mechanics and plumbers, who have found they can earn handsome livings in the Gulf states.

At the heart of Bombay's problems is its ageing port. Built to cope with the clippers and early steam ships of the 19th century, the port is quite incapable of coping with the demands now being made of it. The dock entrances are too narrow for large modern ships, and the water is too shallow.

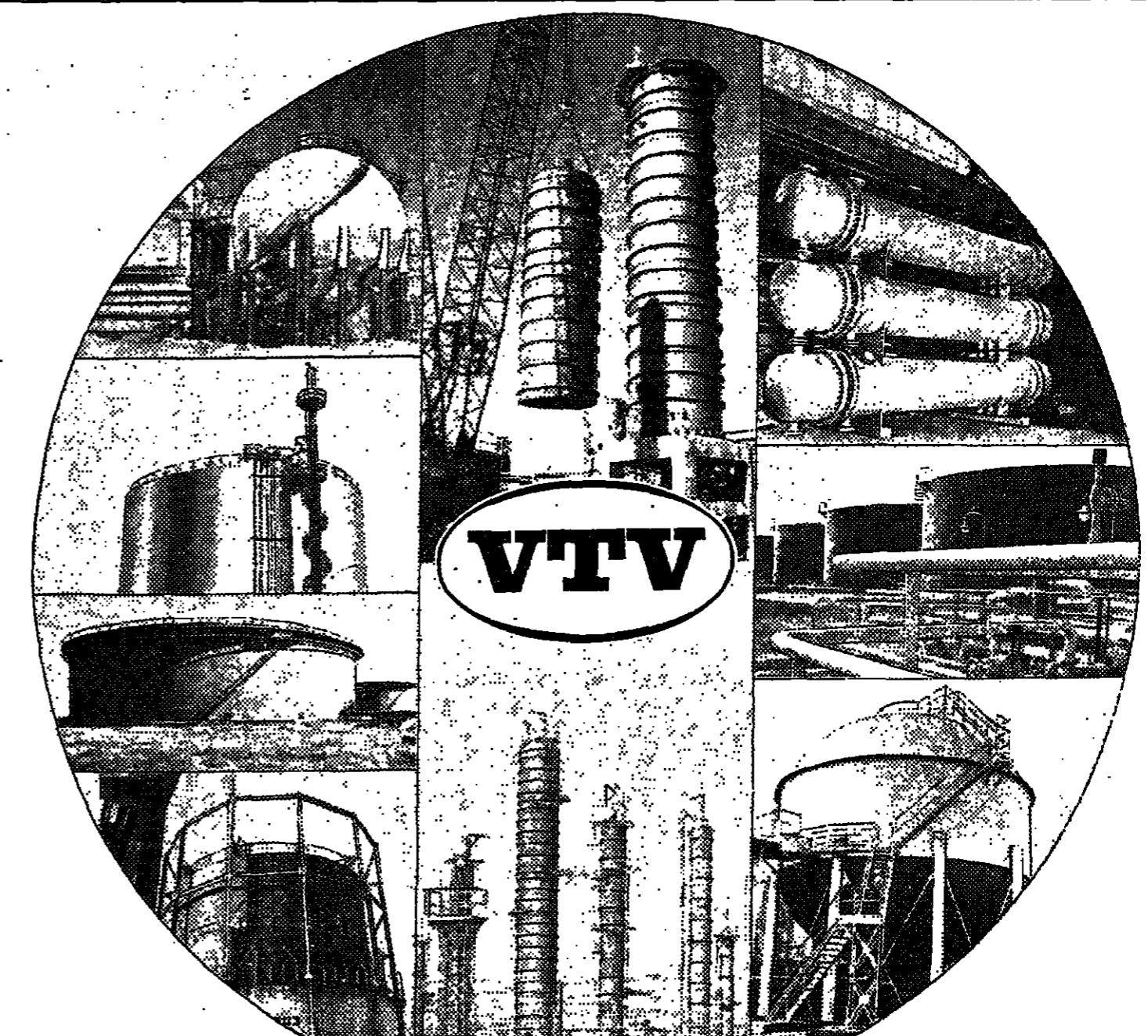
The most modern cranes date back to the 1950s, and most cargo is loaded and unloaded manually. Warehouses will collapse of their own accord unless they are demolished soon. Nor can one ignore an appalling record of strikes, go-slow and general industrial unrest.

These shortcomings have resulted in hopelessly congestion. At its worst, ships have had to wait for 80 days before being unloaded. Bombay's container capacity is tiny, and the container traffic is nothing short of chaotic.

Hopes that a new port will be built nearby at Nhava Sheva have been frustrated for ten years as the authorities in Delhi have dithered. There are signs that Mrs. Gandhi's Congress government is ready to give the green light but even optimists say the port cannot be operational for at least five years.

A new port would mean a new lease of life for Bombay itself, and for its vast industrial hinterland. With such a new lease of life, the whole of India stands to gain.

David Dodwell



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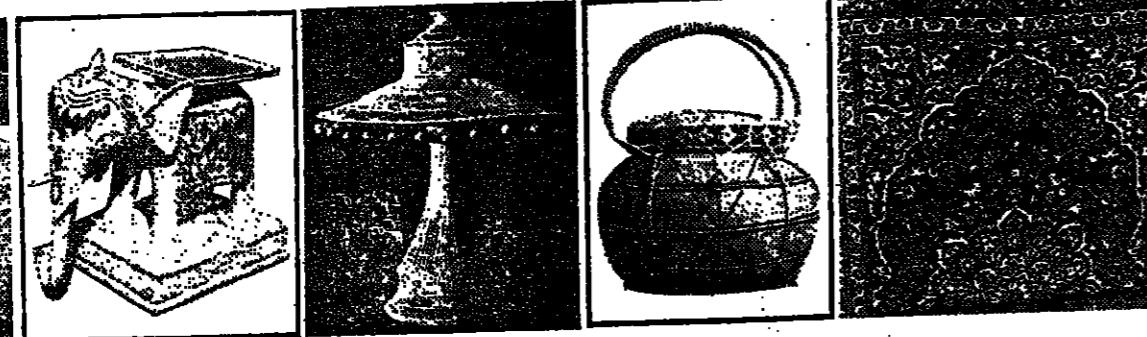


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# Influx of industries changes Bangalore

ONE HIGH-RISE skyscraper already dominates the skyline of Bangalore's commercial area in the vicinity of Mahatma Gandhi Road and another is fast going up nearby. Many Bangaloreans, looking back with nostalgia at their city's reputation as an urban garden, regret this intrusion of modern commercialism. Others point to it with pride, claiming that the 20-storey structures symbolise Bangalore's ascent into industrialisation and its new position as a centre for industry and trade in India's south.

Bangalore, capital of Karnataka State, has certainly grown rapidly in the past couple of decades. It still does not match Madras as the main business centre in the southern region—after all, Bangalore is landlocked while Madras is one of the country's major ports—but business is booming.

Its statistics are impressive. Nearly 50 per cent of the engineering goods exported from the southern region originate from Karnataka and this is a major index of the industrial progress that the State has made. It also explains why Bangalore, its capital, is fast asserting its claim to be the focus of business in the south.

Perhaps the importance of Bangalore began with the decision to locate at least five major public sector industrial units there. This was meant to industrialise what remains essentially an agricultural State but it triggered the growth of ancillaries and feeder industries. Local businessmen were able to cash in on what they call the "spin-off effect".

The major public sector units are the Hindustan Machine Tools, Hindusthan Aeronautics, Bharat Electronics, Indian Telephone Industries and Bharat Earth Movers.

#### Garden city

Each is a recognised profit-making giant with tentacles now spread over many other parts of the country and Bangalore is justly proud of their achievements. More public sector units have come to Karnataka—the Rs 650m Kudremukh iron ore project is the latest and most important—and combined with the growth of large, medium and small-scale units from the private sector, have converted Bangalore from a somewhat sleepy "garden city" to a major business centre where modern problems such as pollution are beginning to emerge.

Bangalore owes its growing importance partly to the fact that it is the capital of an acknowledged progressive and rapidly economic advancing State. Like other States in India where bureaucracy rules supreme, industrial units and business offices are attracted to the fountainhead. But it also reflects the economic development that has consciously taken place.

The State remains predominantly agricultural and income from industry and mining is estimated roughly at no more than 12 to 15 per cent of its total. But it has exploited its abundant natural resources such as iron ore, manganese and units like the Mysore Paper

chromite and the like, used its favourable climatic environment and usually abundant monsoon (which has endowed Karnataka with abundant forests) to surge ahead.

Karnataka has made considerable progress in several sectors in the past two decades. Its high irrigation and power potential, minerals, diverse soils, skills and industrial traditions have been exploited by a combination of infrastructural development, institutional network and incentives—although there are inevitable complaints that much needs to be done under each of these headings.

Industrialisation began in Karnataka slowly and has picked up momentum only in the past two decades. Nevertheless, its first textile mill was established in 1884, its first hydro-electric power station (also the first in India) in 1902 while the Bank of Mysore began operating in 1913.

One of the State's main industrial projects still, the Mysore Iron and Steel Company (now renamed Silesvaraya Iron and Steel) was launched as long ago as 1918. In the early part of the century smaller units in sectors such as sugar, tanning and sandalwood started appearing and in the second the major public sector companies followed. In their wake came such major successful private ventures as Kirloskar Electric and Mico. Foreign investment followed and is growing, although slowly.

The effect of industrial development can be judged from the fact that the number of large units in 1920 was just 29 with a total investment of Rs 50m, giving employment to only 17,000. By 1944, it had risen to 805 units employing 78,000 people. Since then, the public sector giants have emerged and are growing, as are the other large and small units in the private sector whose plants belch smoke inside and on the outskirts of a growing and now sprawling Bangalore.

Leading private companies, apart from Mico and Kirloskar, include Indian Aluminium, Larsen and Toubro, Associated Cement, Binni Mills, Ballapur Paper Mills, Mangalore Chemical and Fertilisers and scores of others. By 1975-76, the industrial turnover of Karnataka had reached Rs 5.5bn and estimates are that it must be over Rs 10bn now. Of this, a total investment of Rs 3bn has come between 1972-73 and 1978, a period that added 119,705 people to the industrial workforce.

The Government has consciously promoted industrial estates and small industry. Fresh investment in the small-scale sector in this period was about Rs 750m and there are now just under 20,000 small units registered in Karnataka although, like the rest of the country, not all are doing what was hoped of them.

Even more striking is the

growth of ancillaries; Karnataka accounts for nearly 50 per cent of the new ancillary units in the country in the 1970s, partly because the public sector giants and partly because progressive units like the Mysore Paper

Mills have deliberately encouraged their growth.

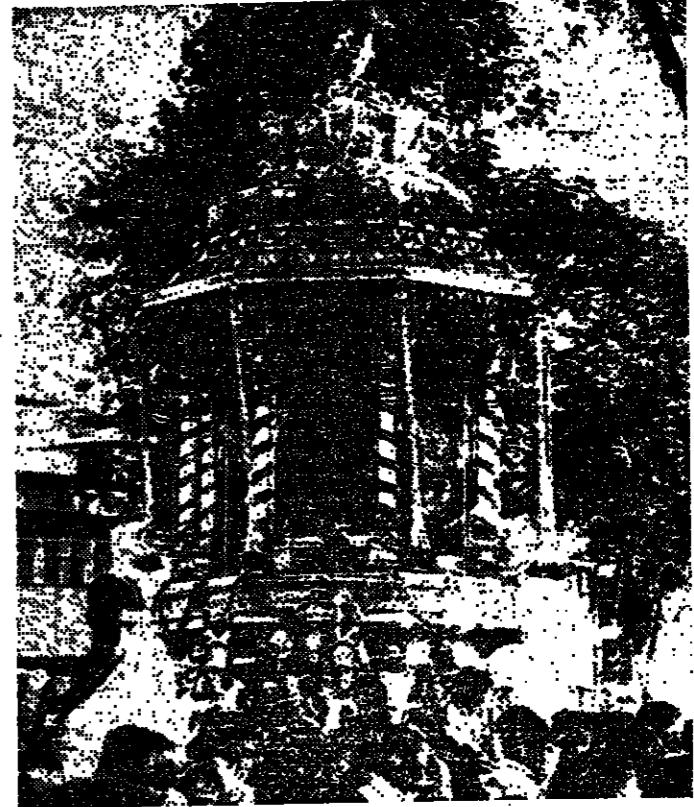
Also helping them are such institutions as the Karnataka State Financial Corporation, the Karnataka State Industrial Investment and Development Corporation, Karnataka Small Industries Development Corporation, Karnataka Industrial Areas Development Board, Mysore Sales International and hosts of others.

Together, they encourage entrepreneurs by providing concessional finance, underwriting public issues, preparing project reports, making technological studies and helping to establish industrial estates and sheds. Mini industrial estates are an integral part of Bangalore's business life. The Peenya industrial estate, located there, is the largest in the country.

An indication of Bangalore's importance is the share of its exports. It maintains its traditional exports (coffee, sandalwood products and so on) and these have been added modern sophisticated engineering and electronic items. Exports increased from Rs 46m in 1971-72 to Rs 1.06bn in 1975-76. Once the Kudremukh iron ore exports get going the figure will swell significantly.

Exports have been helped by agencies specially created for the purpose—such as the Coffee Board and the Central Silk Board—and Bangalore has now been put on the air cargo map by the opening of an air cargo complex.

Growth has been helped by the location of a number of key research institutions which improve products and help entrepreneurs to gain access to modern technology. Some have come up due to defence requirements to help the many ordnance factories. But also in Bangalore are the National Aeronautical Laboratory, Central Machine



Religious procession in the streets of Bangalore

## Scars of progress show in a Punjab town

LUDHIANA TOWN centre shows all the scars of rapid progress. The massive clock tower stands sentinel as a memorial to more sedate times when at all hours of the day and well past dusk a chaotic traffic jam crawls around.

There are glinting new factories, overladen lorries that look as if they might give way at any moment in a pall of fifty exhaust smoke, whizzing bicycles, snarling motor cycles, straining buffalo carts, trotting tongas, and men sweating and grunting pushing carts laden with scrap over the potholes.

There are the mingled smells of any Indian town, but there is also the dust of the Punjab and the acrid smoke of industry to add to the pollution. For Ludhiana is one of the success stories of India's industrialisation. It long ago burst beyond the seams of the sleepy agricultural market town of 20,000 it was when the British left, and indeed was until the mid-1950s.

Along all the roads to the

clock tower is a profusion and a confusion of tiny workshops, foundries, forges, wire works, motor car and cycle accessories, tool makers, nesting under the shade of some bigger factories, including hosiery and textile makers, and factories producing bicycles, sewing machines and electric fans.

Ludhiana is also an exporting town in a considerable way as well and was a storybook success until recently. Now the factories are in difficulty because of power shortages. Most

industrialists spoke of savage power cuts. "We only have assured power for six hours a day and six days a week," said Avinash Rai, a partner of Rita Mechanical Works which makes sewing machines. York Hosiery Mills said the cuts were 16 hours a day. But both factories have their own power generators, even though their use puts up fuel bills 23 times.

The town presents a classic case of growth through small-scale units feeding into bigger ones. It also shows the importance of a general well spread level of prosperity.

Ludhiana lies at the heart of the Punjab agricultural area where the green revolution has been most successful and the farmers are the richest in India. Even in this year of drought and power cuts the irrigation canals have ensured that the fields are full and green. At night the roads become clogged with a procession of tractors going home.

#### Workplace

Many of the small workshops are employed directly in carrying out orders for the bigger ones. And at York Hosiery the managing directors, Balraj Kumar and G. C. Dhawan, said that many of the 2,000 people

in the town work for Rita sewing machine company, getting them out of India has presented problems. The nearest port, Bombay, is hundreds of miles away and there are constant problems with delays to shipments.

Altogether, according to Mr. Rai, the owner, "Transport costs should be between 5 and 7 per cent of production but taking into account congestion and delays and extra charges at the port they come to between 20 and 25 per cent. There is a need for a dry port somewhere in the region."

#### Delegation

For York hosiery, as for much of the fast-growing textile industry in Ludhiana, prosperity depends on the annual delegation from Moscow signing a big order. The Soviet Union takes more than 90 per cent of York's Rs 55m (53m) annual production, as it takes a similar amount from other woollen mills in the town. So far everyone is happy.

The owners, Mr. Kumar and Mr. Dhawan, said: "Business increases by 5 to 10 per cent a year. They don't give us a chance to diversify to other markets." But it might be a matter of concern that one reason why York is so happy is that the Russians buy in bulk so the company does not have to worry about changes in fashion or whether it is merino or Fair Isle or Shetland or mohair which is the current favourite wool.

Kevin Rafferty

# Demands of the economy put pressure on railways

INDIA'S 8,000 steam locomotives may be a delight to the world's train-spotters but they are the hallmark of an ageing industry and symbol of an increasingly serious failure to meet the demands this rapidly growing industrial nation makes on it.

One Western economist who has recently studied India's rail transport problems explained: "Overall, India has an efficient railway system by almost any criterion you care to mention; it fares well against any country in the world. It is just not big enough to cope with the demands the Indian economy is making on it."

Shortcomings have been highlighted this year by extreme pressures, some inevitable and some avoidable. But the net result is that India's Railway Board expects to make a loss in the current financial year of between Rs 500-600m. This is the first year in the red since 1975, and compares with profits last year of Rs 367m, and in 1977-78 of Rs 1.26bn.

## Tumbled

The basic reason for the slump into deficit is simple: traffic carried has tumbled from an expected 222m tonnes carried last year, and more than 210m tonnes carried in the two previous years.

A number of peculiar factors have clouded this year's performance. Severe cyclones in Andhra Pradesh last summer severed the country's north-south railway links, disrupting services for almost three months according to Mr. Manuel Menezes, the Board's chairman.

There was also severe labour trouble in West Bengal and Bihar, which originates about 50 per cent of the railway system's traffic, most of it coal. At the same time, hundreds of wagons were trapped during disputes in the coalfields, and in places like Calcutta port.

Labour disputes in the country's major ports, coupled with severe congestion in Bombay, the largest port, immobilised further wagons and trapped import cargoes at the docksides. Many shippers attempted to sidestep the strike, and where this not only meant that imports had to be carried

over much longer distances, but put extreme strain on rail and road networks around minor ports which were inadequately equipped to cope with the extra traffic.

When the ports were operating, they provided extra problems because a heavy import programme of steel, coal, cement and fertilisers was initiated by the government to meet shortages in the country, and most of these goods had to be transported by rail.

The Board constantly complained that coal cargo, which accounts for about 30 per cent of total traffic—includes up to 25 per cent extraneous matter—ash, sand and stones and so on. If coal was washed at the pithead before loading, the Board insists this would have provided considerable relief to their overstretched resources.

As all these problems were compounded, so there was an acute shortage of wagons and a vicious circle of hold-ups built up. Coal industry spokesmen claim that the wagon shortage was so great at one stage that 14m tonnes of coal stocks built up while industries throughout the country were crying out for coal.

In addition, there was a real fall in rail cargo from factories as industrial stagnation settled on the country. There has been an estimated 4 per cent fall in industrial output in 1979-80. There was also a fall in export demand for iron ore. Between them, all these difficulties affected traffic volume over the year.

Problems were aggravated by declining efficiency on the railways. Train turn-round times deteriorated from an average 13 days to 15.6 days during the year. Punctuality—measured as the number of trains that leave and arrive on time—fell at one point to 82 per cent. It has since recovered to 88 per cent.

Some of the extra strains on the railway system no doubt can be accounted for by the fact that the average length of freight journeys increased by 3 per cent to 743 kms. This was in part due to long hauls of coal from the eastern coalfields in West Bengal down to Maharashtra and Gujarat, and of grain from the Punjab to Haryana and Kerala.

India's railways include both broad gauge and metre gauge track, which creates inefficiencies. Trains travelling on metre gauge have to travel more slowly and cannot carry such large loads. Time is also lost in transhipping cargoes from trains of the main broad-gauge tracks to metre-gauge trains.

Fourteen major routes are currently being converted to broad-gauge track.

More than 8,000 of India's 11,000 locomotives are steam-powered. There are 20,000 diesel trains and the Railway Board has only 1,000 electric-powered trains, which are considerably more efficient to run. Foreign experts calculate that freight cost using electric trains are less than half those of steam locomotives.

## Still running

Steam trains have not been built in India since 1971, but Mr. Menezes predicts that many of these will still be running by the turn of the century. The Railway Board cannot afford to replace them at a faster rate, he says.

All of these problems would not be so crucial if India's road system were better. As coal shortages have become critical, more and more coal has been carried long distances by road. Almost 25m tonnes—about a quarter of total production—will have been carried by road this year.

But road transport costs are alarmingly high—between six and 10 times those of transport by rail. Economic calculations show that while the railways are capable of carrying 50,000 tonnes a day, the best that can be expected of road is 3,000 tonnes.

The railways can improve their performance on a small scale by reducing turnaround time and increasing the rate at which wagons are loaded—particularly coal wagons.

Between November and mid-February, an average of just 8,600 wagons of coal were being loaded every day. A directive from government to improve this has raised daily loading to an average of 9,500. Thermal power stations, in urgent need of extra coal, have in the past month received an average of 3,600 wagons per day, compared

with about 3,000 in the four previous months. Power station stocks have doubled in the past month to 150,000 tonnes.

A similar improvement in productivity has been reported for oil. While loading has stayed steady at 1,600 wagons a day, loads have been carried an average 20 per cent further in the same time—about 750 kms.

The increase in productivity is closely linked to a new productivity-linked bonus scheme agreed with the railway unions late last year which will cost the Railway board about Rs 370m. Industrial relations are certainly much improved from last summer, when a long slow nibbled away at

productivity.

While these changes can bring some gains, foreign experts believe that the only long-term solution lies in heavy investment and, most crucially, electrification. One authority said: "Electrification is the single most important factor in improving India's railway system. Everything else will provide only temporary and marginal relief."

"While India is a huge country, its transport problems are not so complex. You just need much more of the same stuff—more trains, more wagons. In the end you have just got to take a deep breath and go ahead and make the investment."

At present, less than 8 per cent of India's 61,000 kms of railway track is electrified, so there is a long way to go before even all the major routes are converted. The Government allotted Rs 6.5bn for capital investment in 1979-80, but there is no certainty that this will be increased substantially in the year ahead.

## Investment levels

There was an estimated shortage of 30,000 wagons in 1979, but only 13,000 new ones were brought into operation, all of them manufactured domestically. Investment levels will have to be boosted a long way to breach this gap.

The World Bank has agreed a loan of \$190m for railway modernisation, which will be of considerable help. But little of this cash is likely to be spent in the near future.

By 1982 the railways will have

to carry in the region of 320m tonnes a year—about 60 per cent more than is carried at present. Of this, 35 per cent is likely to be coal, and 14 per cent steel.

One foreign expert predicted: "If the economy is to grow at all fast, then the railways just have to be improved. Otherwise, the situation is going to deteriorate from serious to ridiculous in no time."

"It will take some time before current investment pays any dividends, so in the meanwhile they will have to do what they can by improving labour efficiency, reducing turnaround times and trimming the average length of journeys. Basically, the country is going to be very hard-pressed for at least three or four years to come."

David Dodwell



Overcrowded public transport, like the buses pictured above, means that as many passengers travel on the roof as inside

# Chronic power shortage costs industry dear

SOMEONE HAS switched the lights out on Indian industry. As power shortages have become endemic, so the authorities are beginning to count the cost, and they estimate that erratic power supplies are costing industry about \$3.5bn a year.

With electricity supplies falling short of demand by about 20 per cent, every sector has suffered. Coal mines, steel plants, fertiliser factories, in fact, every area of industry has been disrupted. Farmers have in parts been rationed to four hours of electricity a day, and households—where they have electricity at all—have suffered similar black-outs. Even tourists in exclusive hotels, such as the Grand in Calcutta, have been hit, as diesel generators installed to bypass power cuts have been starved of fuel.

Power shortages have been a fact of life in India for at least a decade, both as a result of low productivity from power stations, and because of failure by the Government and power authorities to anticipate the rapidly-growing demand.

A team of foreign economists in a recent report on India's power industry, talked of "the exceptional rate at which reliance on electricity has grown"—about 10 per cent a year since 1950. India's power generation has grown at an annual rate of 5 per cent, which would be reasonable in many countries, but clearly is insufficient in India.

In Rajasthan, all heavy industry has been closed down, with domestic users limited to between 8-17 hours of power a day. At the end of February, the West Bengal government closed down all heavy industry for a period of three days and power supplies have been erratic since then.

## Mines closed

Many blame the current extreme shortage on monsoon failure in 1979, which has hit hydro-electric power output. But experts disagree: "The fall in hydro-electric output is a marginal problem which comes on top of a more structural problem—the shortage of thermal power," said one independent expert.

Only Kerala and Orissa have anything like normal supplies of power. Elsewhere cuts vary from 8 per cent in Gujarat, to 100 per cent for 7-15 days a month for industry in Uttar Pradesh. In recent weeks, the three states of West Bengal, Rajasthan and Maharashtra have been the worst hit.

CONTINUED ON NEXT PAGE

The government estimates that 6m tonnes of coal output was lost through power cuts in the nine months to January 1980.

In the three months ahead, problems are likely to be compounded first because farmers will be using large amounts of electricity to pump water to crops growing in the fields, and second because hydro-electric power is unlikely to rally until the next monsoon arrives.

In the past, large companies have been able to override power shortages by installing their own captive diesel generators. But a critical shortage of diesel fuel has now closed this "escape route." An executive in a multi-national electrical company admitted that about 15 per cent of output had been lost in the past year, even with diesel power used as a back-up. His company is probably typical of large companies, while smaller factories without any diesel back-up are losing between 30 to 40 per cent.

As a stop-gap measure, the

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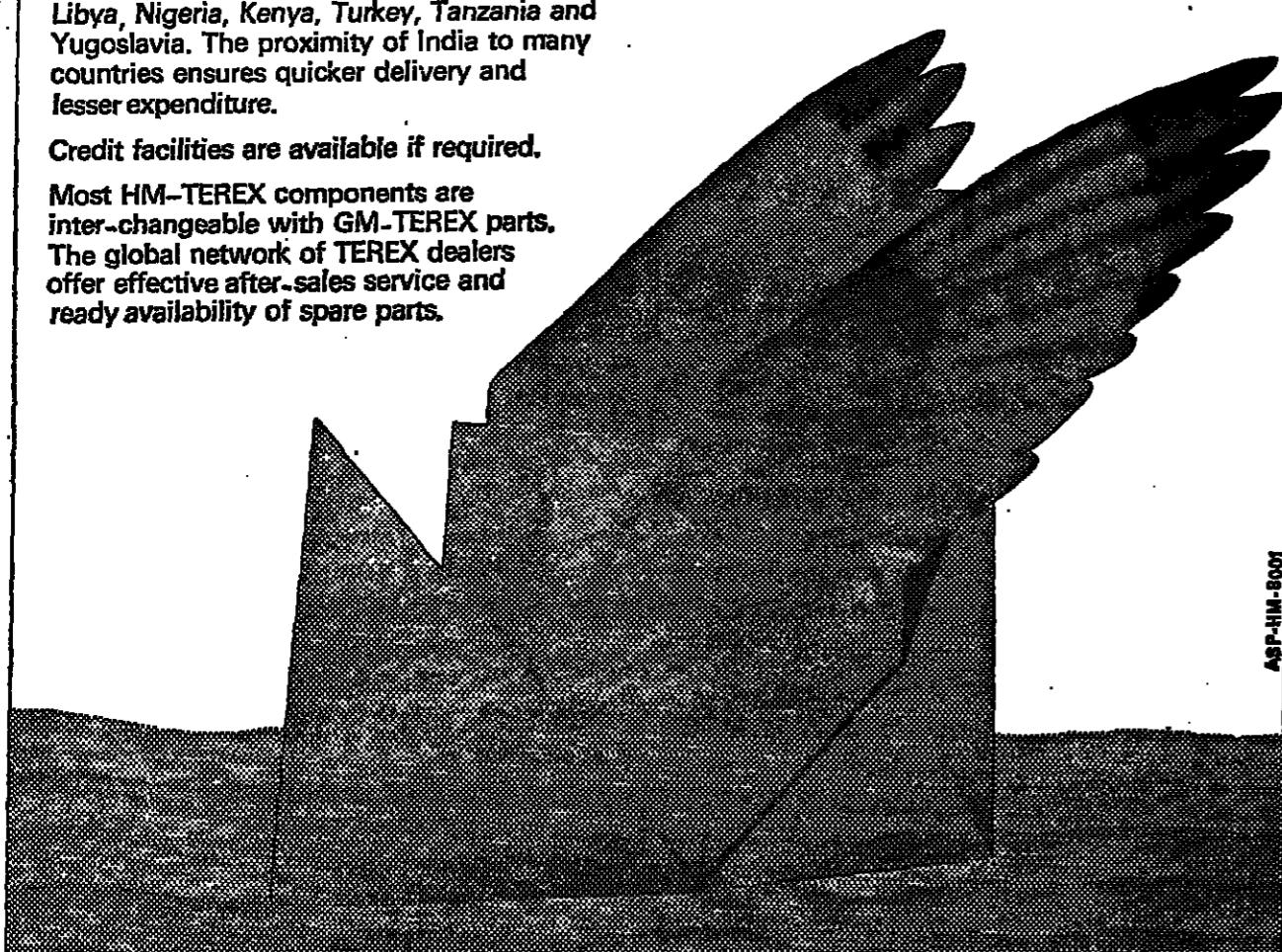
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## INFRASTRUCTURE

# Import programme puts strain on ports

CONGESTION IN India's ports is costing the country dearly, not just in lost exports and delayed imports, but in penalties and surcharges imposed on shippers.

In 1979, an estimated Rs 10bn (£549m) was lost in shipping surcharges, demurrage costs and export losses. In a three-month strike at Calcutta port early last year, Rs 900m was lost in just exports alone.

As the country sets out to encourage a more liberal import policy, so there is an urgent need to boost port capacity and reduce delays. Talk of new investment in ageing ports such as Bombay, and in a number of newer ports is widespread, but detailed policies are still awaited.

Total traffic passing through India's ports rose by 12 per cent in 1979 to over 70m tonnes and was worth Rs 120bn. But Bombay, the country's busiest port, handling around 16m tonnes a year, was hopelessly congested. In November last year, 18 ships were waiting to berth, and the average waiting time was 41 days. The backlog has now been cut to three ships, and waiting time is about 10 days.

The position has been little better in Calcutta, where 24 ships were waiting outside the port in November, with an average waiting time of 26 days. This backlog has also been trimmed back so that only five ships are now waiting.

Dr Subrata Ray, director of planning and research at the Bombay Port Trust, explained how a 12-day strike in May 1977 started with just two ships waiting and ended with 44: "We have never really managed to make up the backlog since then," he said.

The inefficiency in Indian ports is no doubt one of the reasons why one strike can have such long-term consequences. While in many countries, ships expect to be unloaded at a rate of 2,500 tonnes a day, in India, the average is 200 tonnes. Low productivity means that in Calcutta, the cost of handling cargo now averages rupees 145 a tonne—Bombay, which averages Rs 23, is far from cheap.

Severe strain

A heavy import programme of essential commodities has also put severe strain on the country's ports. More than 18m tonnes of oil have been imported in the past year, while shortcomings in the country's coal industry have meant the import of 1.5m tonnes of coking coal and millions of tonnes of steel, fertilisers and cement.

At the same time, iron ore exports, mostly to iron ore, remain about 18m tonnes a year.

A foreign economist investigating the workings of India's ports nevertheless asserts that there is no basic under-capacity in the country. He claims that only Bombay is genuinely inundated with more traffic than it is equipped to handle.

Bombay port was opened 109 years ago, and has barely changed since. A tremendous explosion which destroyed a large area of the port in 1942 was passed over as an opportunity to enlarge or modernise it. It now has 45 berths, just seven of them added since the first steam ships arrived in 1873.

A large proportion of its traffic consists of bulk cargo: imported fertilisers, fertiliser raw materials, vegetable oil, crude oil and petroleum.

Dr Subrata Ray concedes that most of the warehouses are in such urgent need of demolition that they will soon collapse of their own accord. Yet he claims that the port is working so hard that work of this kind is impossible.

Calcutta port has problems of a different kind. As a riverine port, it is separated from the Bay of Bengal by more than 50 miles of "bars, bores and bends" along the Hooghly River. Like Bombay, it suffers



Unloading a cargo of rice in Calcutta docks

products, and exported sugar, oilseeds, iron and steel. Textiles, engineering products and marine products make up a smaller proportion of exports.

In many countries, these bulk cargoes have long since been containerised. Indeed, Bombay is the country's leading container port, handling around 39,000 tonnes last year. But this accounts for only a fraction of Bombay's bulk traffic, and by all accounts the port is hopelessly ill-equipped to cope with containers.

It has no gantry cranes, and since no inland customs depots yet exist, containers have to be packed on the dockside. Experts claim container ports need between 25 and 30 acres along the dockside for stacking, but Bombay has just a quarter of this area. Even port trust officials admit that container loading can be chaotic.

The general level of mechanisation in the port is very low. It employs about 60,000 dockworkers, and unions have doggedly resisted technologies which displace workers. For this reason, a fertiliser dock with four high-capacity 13 tonne cranes worth a total of Rs 11m have been lying idle for three years.

If mechanical loading methods were used, the port could shift in an hour what currently takes gangs five days to move. Forklift trucks are scarce, and most mobile cranes date back to the early 1960s.

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All unions are associated with one of the major political parties and, depending on which is in the ascendant at a particular time, certain unions can always expect backing from State or Federal Government. Madras port suffers from inter-union rivalries of a kind similar to Calcutta.

Because of these numerous problems, shippers have recently imposed penal congestion surcharges on Indian ports. After rising briefly to 50 per cent in the middle of last year, the surcharge at Bombay is still 25 per cent. In Calcutta and Madras it is 30 per cent. An improvement in labour relations and productivity since Mrs. Gandhi's general election victory has led India's shipping bosses to press the foreign conference to trim surcharges back to 10 per cent, but no answer has yet been received.

Calcutta's new port at Haldia has been operating since 1977, with a modern container terminal and an oil jetty. But it has never worked at a fraction of its capacity, mainly because the infrastructure of railways and roads linking it to Calcutta and its hinterland has still to be developed. The railways are planning to start building container wagons, while three inland container depots are to be built. All of this will help to boost India's rudimentary container handling capacity.

India's other main ports suffer from similar infrastructural limitations, which means they have never easily been able to cope with trade spilling over from Bombay and Calcutta.

While Madras port has now been given the go-ahead for a container port—India's third—it is still mainly equipped for the export of iron ore. Both Madras and Visakhapatnam (often called Vizag) have equipment to handle 6,000 tonnes of ore an hour. Ports in Goa and at Paradip between them clear 20m tonnes of ore a year, most of it going to Japan, but there are still severe limitations on their ability to handle other cargoes.

In view of these limitations, Mrs. Gandhi's new Congress Government seems to have given the green light to plans for a new port at Bombay. Plans for this port at Nava Sheva have existed since 1965. The new port would handle containers, bulk cargo, and modern vessels with a draught too deep for Bombay, releasing the main port for general cargo. When the plan was first mooted, the port would have cost Rs 400m, while the estimated cost now exceeds Rs 1.8bn.

The central government has also doubled its budget for capital spending in the ports to Rs 80bn, with the lion's share going to Bombay. This will allow the introduction of modern machinery, provided trade unions do not dig in their heels.

With the caveat that labour relations are still a long way from improving, independent experts believe India's port congestion problems can be solved quite quickly. One official said: "The ports' problems are such that a simple dose of heavy investment and improved management methods will solve most of them."

Whether the new government manages to dispense either of these "simple doses" has yet to be seen.

David Dodwell

## Power

CONTINUED FROM PREVIOUS PAGE

West Bengal state electricity board recently imported five 20 MW gas turbine sets from John Brown of England. The sets were installed within seven months of contracts being signed, and have provided some short-term relief. But with the rising price of diesel, these sets may prove an expensive way of adding to the state's power-generating capacity. Private companies acknowledge that their hastily-installed diesel generators provide very expensive power, but one executive noted ruefully: "Expensive power is not so expensive as no power."

The main reason for the power shortage is low capacity utilisation from the thermal power plants, which supply 55 per cent of the country's power. Output from them has never bettered 55 per cent of capacity (Britain's power stations average 75 per cent, while the private Indian power plant run by Tata has consistently produced 85 per cent of its capacity). At present, India's power plants average 48 per cent capacity utilisation.

But output varies widely. West Bengal's Santalibh plant, which The Times of India recently described as "a by-word for inefficiency and mismanagement," has averaged about 30 per cent. The Damodar Valley Corporation (DVC) in Bihar, which supplies West Bengal and large parts of the coal belt, has an installed capacity of 1,950 MW, but in the past year has never produced more than 500 MW.

The coalfields, which are supposed to receive 250 MW a day, get an average of 140 MW. After a degree of government paralysis during 1979, Mrs. Gandhi's emphatically elected Congress government has wasted

no time in attempting to remedy what problems it can. New power plants have been commissioned, most conspicuously the four "super thermal" stations at Singrauli in Uttar Pradesh, Ramagundam in Andhra Pradesh, Korba in Madhya Pradesh and Farakka in West Bengal.

Between them, these plants should provide extra capacity of 7,200 MW, but none will come on line before 1982. Funds worth \$600m from the World Bank and \$418m from the OPEC special fund have been provided for these plants.

The Government announced just a week ago that it is prepared to invite private companies to build and operate power stations in future, selling their power to the state electricity boards for distribution. It is hoped that a dose of private enterprise will perk up efficiency as well as total output.

It is also likely that foreign companies will contribute to improving power production. The visit of a West German team, briefed to analyse the country's output problems, has attracted public attention.

The Government is also likely to boost hydro-electric power—there is thought to be potential for about 86,000 MW in India. Only about 10,000 MW is currently produced by hydroelectric stations, but a further 10,000 MW has been commissioned.

Total installed capacity at present is about 30,000 MW, and another 13,500 MW should be in operation by 1983. Of this additional capacity, 3,000 MW will be ready by the end of the current financial year, with 2,000 MW planned for 1980-81.

and 2,300 MW for 1981-82. Nuclear power generation in India is tiny at the moment, accounting for just 2 per cent of total output. There are no detailed plans for boosting nuclear capacity in the near future, partly for political reasons, partly for political sensitivity. But there are indigenous supplies of uranium—an estimated 20,000 tonnes of yellow cake fuel. India also has the world's largest supplies of thorium, another nuclear fuel (an estimated 450,000 tonnes).

Another means of boosting power output is to reduce transmission and distribution losses, which are currently estimated at an alarming 20 per cent. India has in the past concentrated its resources on increasing power capacity, at the expense of improving distribution. This imbalance will have to be corrected before further areas of the country are provided with electricity (just 40 per cent of India's villages are supplied with electricity).

India's electricity grid is also still rudimentary, and there is no real hope of improving the grid system in the near future. The grid network is expected to grow slowly, probably only when states have a basic surplus of supply.

Since most of these Governmental plans to ease the power shortage are likely to take two years or more to bring relief, it seems the best thing India can do is pray for rain. If the monsoon is good, then the pressure will be eased. If it is not, then belts will have to be tightened still further, no matter what the cost to the economy.

David Dodwell

# Shipping emerges from cash-flow problems

THE WORLD crisis in shipping over the past five or six years has hit India as hard as any country. With falling freight rates and rising costs, especially in wages and dockside facilities, there have been inevitable cash-flow problems. But the signs are that the industry is now emerging from this trauma, and in a reasonably healthy position.

It would appear that income from shipping is now rising and a 28 per cent rise in rates on one important conference, that covering the UK and continental Europe, should do a lot to help sorely-pressed balances back into the black.

In addition, a much-needed management restructuring of the State-owned Shipping Corporation of India, which accounts for just over 51 per cent of the country's fleet, is

having beneficial effects. It begins to look as though the corporation, after increasing losses in the past two years, may get back into profit in the financial year ending on March 31.

The industry's problem, in both the private and public sectors, is to win sufficient freight to remain profitable. In a world where ships increasingly are being laid up this is not easy. India has not had to lay ships up as other countries have — the State corporation has not laid-up a vessel for over five years — but then its fleet is much smaller and confined to the sort of vessels which have been able to weather the economic problems rather more successfully.

It has only two Very Large Crude Carriers and their operation has been commercially

disastrous. When the vessels were ordered there was no port in the country that could accommodate them. They were put out on charter at a time when rates had dropped alarmingly and the result was that the two lost £2.5m in 1978-79.

To make matters worse, the refineries they were intended to serve were not ready anyway by the time the vessels had been delivered.

## Too little spent

India also has two large oil/bulk/oil carriers but there are no ports which can really handle these either.

Port problems are one of the factors which militate against the development of a modern fleet.

Too little has been spent on port infrastructure in recent years, so that turn-round time is slow, adding to port charges.

There are ships flying the Indian flag that can handle 1,500 tons a shift. But there is no handling equivalent at any Indian port which can move goods at this landed rate. Such a slowing in unloading is another factor pushing up costs.

There are signs that the Government recognises this problem. It has just decided to spend at least £45m on developing ports, twice the present year's allocation.

The Government has almost certainly been influenced in its decision by the knowledge that six out of the country's 10 major ports are working beyond capacity, which has limited the amount of goods that can be handled.

The problem the Government has to overcome was described by Mr. V. D. Chowgule, chairman of the All India Shippers' Council, last autumn when he

told the annual meeting that the ports were saddled with problems such as congestion, antiquated cargo handling machinery, low productivity, high occupancy berth rate and delays in turnaround.

If the capital spending will help overcome the dockside problems investment in new vessels will go some way to producing a more modern fleet. India's fleet is not noticeably up to date: of 19 bulk carriers, 10 were built before 1970; of 73 cargo liners 43 were built before that year. Only the combination carriers are modern, nine out of 12 having been built in the last decade.

The nationalised corporation is doing something for this via a big order programme. It has 21 vessels of 380,000 dwt under construction in world yards. Six have been placed in Britain, at Sunderland Shipyards. Six more are in Poland, four in Yugoslavia, three in East Germany and three at home in India.

All the foreign-placed orders are for cargo liners but the Indian ones are for a bulk carrier from the Cochin yard, a 76,800 dwt ship, a small 4,489-ton passenger-cargo from the Mazgaon dock in Bombay, and three cargo vessels from the Hindustan Shipyards, totalling 50,100 dwt, at Visakhapatnam.

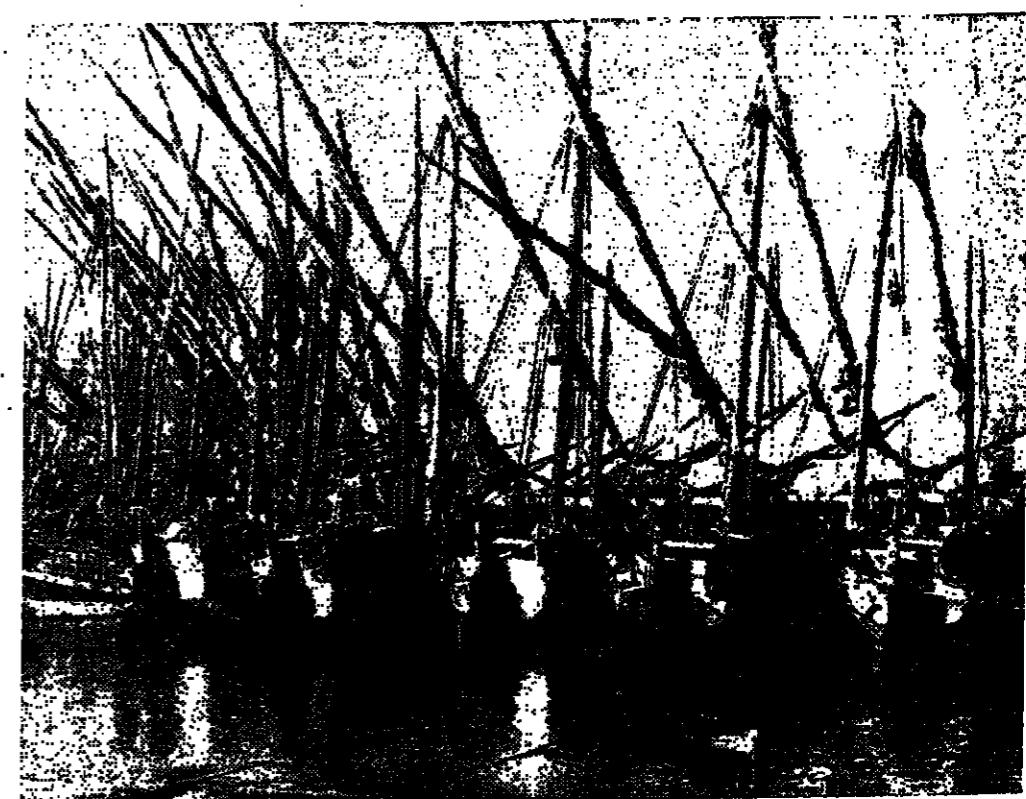
The shipping industry took a significant step to update its facilities in September, 1978, with the introduction of the first container service. That it should have taken so long after their inauguration in the rest of the world is a commentary on India's development of modern commercial practices.

The first service was a

monthly one between the country's west coast and Australia. Since then destinations in Europe, the Soviet Union and Japan have been added. Future plans envisage an extension to the U.S. north Atlantic coast and the Great Lakes via the St. Lawrence Seaway.

As the lights come on in the tower blocks on Malabar Hill and dusk falls on Bombay, Admiral Dev turns back to his desk. But not for long. Next year his time will be his own. His philosophy though is a simple one. "I have enough to live on. When I've had my two meals a day, what more could I want?"

Anthony Moreton



Glyn Ganin  
India's other shipping fleet: dhows tied up in Bombay harbour

## PROFILE: REAR ADMIRAL KRISHNAN DEV

FROM HIS office on the 16th floor of the headquarters of the Shipping Corporation of India, Rear Admiral Krishan Dev has a commanding view of the Malabar Hill across Bombay's Back Bay. It is a view he will not have for much longer. He is 60 at the end of the year and then he will retire as vice-chairman and managing director of the corporation.

What will he do? "I don't know. After the steel industry this is the largest investment in the country. So there is nothing bigger to entice me."

"Anyway, I work ten hours a day and I really have no ambition. When I came here, the corporation was losing money and I will leave it a profitable concern. The same thing happened in my last job when I was chairman and managing director of the state shipyard at Garden Reach, outside Calcutta. I turned it round to profitability in two years."

"So there is nothing in business to attract me. Perhaps I will do something completely different — run a little primary

school. Who knows?"

Admiral Dev has been with the shipping corporation for nearly three years. It has been a difficult period. The State-owned corporation owns 52 per cent of India's shipping and he arrived in the wake of the collapse of world shipping after the 1974 oil crisis.

"They have been very difficult years for shipping but I am contented because the Indian shipping industry is looking up. We suffer from over-manning. I admit. In spite of this, wages in the industry are as good as any in the country."

### Hard sell

If he has any regrets it is that Britain is contributing too little to the growth of the Indian economy.

"Do you know, Britain is the only country not to have a chamber of commerce here in Bombay? There is an Indo-French chamber, an Indo-German one and a lot of others, but no British — you leave it all to agents. But this is a very hard, competitive world. You

need to come out here and push and sell aggressively."

"When President Giscard was in Delhi for the Republic Day celebrations in January, he flew down to Bombay specially to attend a dinner for 300 businessmen. He was very impressive. He made an excellent speech in English, spelling out what France could do for India. It makes me sad to think how little Britain does. I have six ships on order in British yards and when I visited them they were most helpful. But there were no follow-up visits out here."

Admiral Dev is convinced Britain is looking too much towards Europe when she should be paying more attention to a market in which she has all the natural advantages — history, language, connections. There is more news about Britain here in the papers than about any other country overseas.

"I always go to Britain first. Britain is where I feel most at home. It is so for most Indians." Admiral Dev first came to Bombay in the early 1930s as a boy of 13. He was born and

brought up in Lahore, in what is now Pakistan, and spent nearly all his adult years in the Indian Navy. He joined in December 1941, four days after the Japanese bombed Pearl Harbour, and specialised in logistics during his service career.

Part of his service was spent in London as deputy naval adviser at the High Commission and during 1958-59 he attended the National Defence College at Latimer, Bucks. He recollects with relish the Westbury Hotel in London's Mayfair ("so convenient") and a speech by Mr. Denis Healey, then Opposition spokesman on Defence, when he was at Latimer ("such a good politician").

As the lights come on in the tower blocks on Malabar Hill and dusk falls on Bombay, Admiral Dev turns back to his desk. But not for long. Next year his time will be his own. His philosophy though is a simple one. "I have enough to live on. When I've had my two meals a day, what more could I want?"

been passed which cuts off aid to companies which employ more than 22 crew in certain types of vessel. Indian ships carry a crew of between 60 and 70 where other countries manage with about 25.

However, the shipowner does have the very real advantage that he can get cheap credit from the Shipping Development Fund to build his vessels. Both in the private and public sectors money is available at 4½ per cent over 20 years, a considerable advantage over commercial rates charged almost everywhere else outside the Communist bloc countries.

One thing that all the interested parties would like is a stricter enforcement of the guideline laid down by the United Nations Committee on Trade and Development that freight should be carried on a 40:40:20 basis — that is, 40 per cent carried in vessels of the country selling the goods, 40 per cent in vessels of the country buying them and the rest in third-country ships.

What India would also like to do is to bring its manpower requirements into line with those introduced elsewhere. India is prodigal in the use of manpower on board, not unexpectedly, of course, in a country with such a vast population and such enormous employment problems. India casts envious eyes at Japan where a law has recently

been passed which cuts off aid to companies which employ more than 22 crew in certain types of vessel. Indian ships carry a crew of between 60 and 70 where other countries manage with about 25.

The second part of the Honaver report should be published before long. India's Congress Party administration now has the matter to deal with because the Janata Government took no action on the initial findings. It may be several months before the industry gets any guidance from the Government about whether it accepts, and intends to implement, any of the findings.

For a country which is small in shipping terms, India accounted for just 1.42 per cent of world tonnage last July — great advances have been made. The fleet has grown in every year since Independence, and a great review of requirements is going on within the various companies.

India is asking itself what its future requirements will be, how they can be met and what ships will be needed to meet these requirements. There is likely to be an increasing move towards container traffic, and more product carriers. For a small shipping nation this is a healthy approach to a difficult problem.

Anthony Moreton

## By the river Bhadra India's largest paper manufacturing plant gets ready to go on stream

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VC/MPM/05/80

# Coal reserves are vital



A British mining engineer shows an Indian miner how to operate the circular shearer which cuts away the coal at India's first mechanised longwall face, at the Moonidih Mine, near Dhanbad.

Open-cast mining currently accounts for 23 per cent of total output, but this will rise to 45 per cent by 1985, with total production projected at 90m tonnes. Within a depth of 250 feet, Coal India has discovered seams averaging 20 metres thick. One deeper seam is 140 metres thick.

Efficiency can also be improved by moving heavy coal-using industry closer to the pitheads, and by heavy investment in washing plant.

Executives at Coal India predict that demand for coal could rise from the current 120m tonnes to 200m tonnes by 1988. Starting with a production target of 113m tonnes in 1979-80—a target missed by about 18m tonnes—they still aim for 134m tonnes in 1980-81 and 143m tonnes in 1982-83.

These targets are considered highly optimistic, even though experts believe that current capacity should enable annual production to reach 120m tonnes a year. Coal India's commercial director admits that in other countries this might be true, but that Coal India has learned it must always preface projections with the caveat "In Indian circumstances..."

David Dodwell

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nationalisation, with Rs 2bn of investment, output spurted to above 100m tonnes. But there it stuck for the past five years. Production in 1979-80 is expected to be close to 100m tonnes.

In 1979 alone, coal supplies to steel plants fell by 6 per cent, to cement plants by 3.5 per cent, to the textile industry by 8 per cent, to heavy engineering companies by 14 per cent, and to brick kilns by 55 per cent.

Many fertiliser factories have closed for want of coal. Steel plants have reached such a desperate position, with coal stocks down to between three and four days' needs, that 1.5m tonnes of coking coal is being imported from Australia and Canada.

Defending its failures, the coal industry blames acute power shortages, failure by the railways to supply wagons for coal distribution, an unpredictable labour force, and an antiquated industry inherited from the private mining companies when it was nationalised in the early 1970s. There is some truth in their claims, now, many of the problems that now dog the industry would probably have emerged anyway.

The tiny Pootkeo Mine near Dhanbad is typical. About 1,500 miners work manually at coal faces first opened up 100 years ago, producing about 700 tonnes a day. Water streams through the mine and, with power cuts, flooding is a constant threat.

Above ground, women load railway wagons using wicker baskets carried on their heads. The mine has a mechanised front loader, which could fill wagons in one tenth the time, but it is used to a fraction of its capacity because to end manual loading would result in heavy unemployment.

The Jharia coalfield, on which the Pootkeo Mine is situated, provides a large part of India's high-grade coking coal. But after a century of private shafts that have extracted only the richest coal seams. Up to 1bn tonnes of coal is trapped in pillars left in the old mines and there is no cheap way to recover it. More than 100 underground fires consume about 8m tonnes of coal every year, and immobilise about 350m tonnes in seams around them.

More than 400 coking coal mines in private use have been nationalised to just 85 since 1970. Central railway loading has reduced loading points from 200 to 80.

A master plan exists to clear the Jharia field of a century of chaotic growth—a web of railway lines and roads—and to shift rivers and townships which have grown up over the coal.

It will free large areas for open-cast exploitation—and extraction methods which will allow the miners to effectively deal with many of the underground fires.

Inevitably the plan is very expensive and will cause considerable dislocation for the communities living on the field. No date has been set for either initiating or finishing the plan, but until it is, huge quantities of precious coking coal will remain trapped underground.

The nationalised coal industry has also inherited terrible labour problems. Gangsterism

and Mafia-style operations are commonplace—an inheritance from pre-nationalisation days when mine bosses used hoodlums to terrorise recalcitrant workers.

Absenteeism is chronic. Coal India estimates that between April last year and January, 5m tonnes of coal output was lost through absenteeism.

One foreign expert on India's infrastructural problems explained that in Bihar, where the problem is most acute, "you just don't have an industrial labour force in the sense we are used to in the West. Many don't yet seem reconciled to such basic work habits as turning up on time. During the harvesting season, many mineworkers simply disappear for weeks."

Strike losses have dwindled since January when Mrs. Gandhi won power, and by late February output had risen by 25 per cent to 380,000 tonnes a day. But no one is sure that there is a causal connection, whether industrial peace will last. Most feel that labour troubles are far from over, if only because the industry is overmanned to the extent of at least 50,000 workers.

Power shortages have created severe problems for the industry. The Dhanbad Valley Corporation, which supplies power to the Bihar and West Bengal coalfields, has been running at less than 40 per cent of capacity for the past six months, with the result that the coalfields, which need 250 MW a day, have never got more than 210 MW, and on average get 140 MW.

### Flooding risk

Power cuts of about six hours a day have become normal, which has resulted not only in a loss of 6m tonnes output in the nine months to January, but has greatly increased the risk of flooding. During last year's monsoons one sixth of the mines were closed because they were flooded.

Shortages of railway wagons meant that pit head stocks rose to a peak of 14m tonnes last year. With the railway system still over-stretched, distribution is still poor.

This problem would be eased if coal was washed before loading. Coal users complain that up to 25 per cent of the coal they receive is in fact ash, stones and other extraneous materials.

As the railways have failed, so more and more coal is being distributed by road, about 25 per cent of all coal is currently being delivered by truck, at in calculable extra cost to consumers.

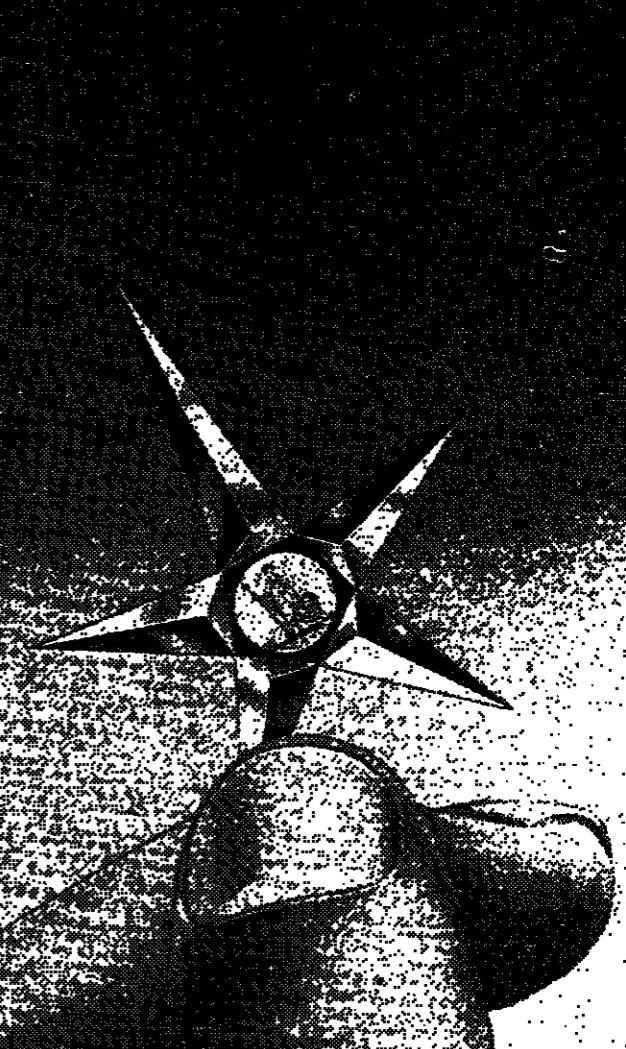
Coal India has started a programme of mechanisation which could help to improve output.

At Moonidih Mine, near Dhanbad, the first mechanised longwall face will soon be in operation, using equipment made by the Dowlas group of Britain.

Three other longwall faces are being worked by conventional methods, and are set to be mechanised during the coming decade.

The Moonidih Mine currently produces 1,500 tonnes of coal a day, but once the mechanised face is in full operation output should rise to 7,000 tonnes a day.

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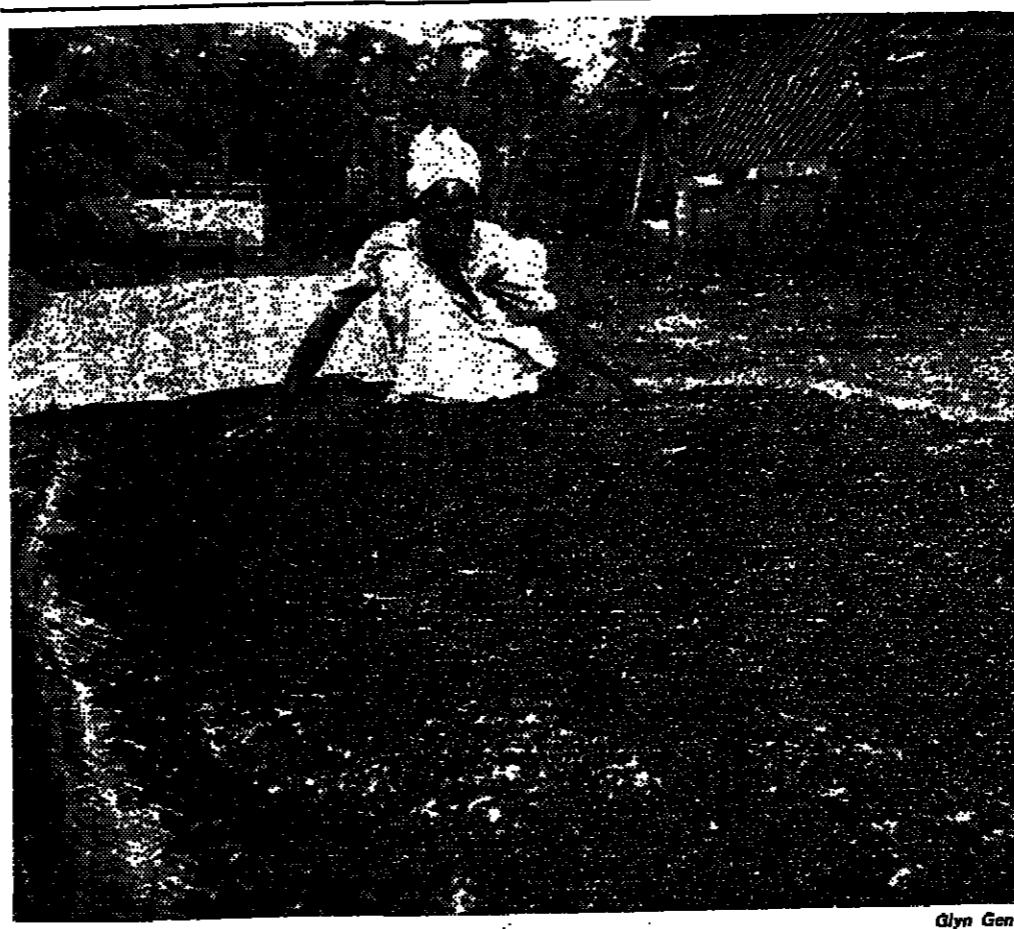
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Drying peppercorns on sisal matting in Kerala, southern India

# Tea industry plans to raise output

THANKS TO a steady and substantial spurt in domestic consumption the challenge before the Indian tea industry in the 1980s is to raise output in step with demand, especially internal demand.

In fact, the challenge in the 1980s will be very much the same and for precisely the same reason. Both the Government and the industry are agreed on the quantitative targets to be achieved by the end of the current decade as well as by the year 2000, but they differ on approaches to the goal.

According to the latest projection by the industry as well as some official agencies, India needs to produce 1,400m kilograms of tea by 2000 to meet the growing internal demand in full and at the same time satisfy a bigger export requirement. The domestic consumption of tea has been rising at a steady rate of 5 to 6 per cent per year compound with the result that the figure which stood at only 200m kilograms at the beginning of the last decade is likely to touch the 370m kilogram mark during the current year.

According to the above projection it is likely to jump to 461m kilograms by 1985, to 585m by 1990, to 743.9m five years after and to more than 1,000m kilograms by the turn of the century.

## Feasible target

It is encouraging that both the industry and the Government believe that 1,400m kilograms by the year 2000 is a feasible target, but as already mentioned each has its own approach to the challenge. In the industry's view raising tea production by more than 2½ times over the present level of 547m kilograms (1978 production) would involve at least 250,000 hectares of additional land for new planting, some Rs 1.5bn to Rs 1.6bn of finance plus adequate fiscal incentives for the industry to generate more internal resources to be ploughed back for development.

These are broad ideas. To work out detailed projections of consumption, production and export trends of tea up to the turn of the century as well as financial and physical targets that will have to be set, Mr. C. S. Samuel, chairman of the Indian Tea Association, in his capacity as chairman of the consultative committee of plantation associations, has set up a working group of the industry—which shows that the industry has begun to take the challenge seriously.

However, judging from the views of Mr. P. R. Goswami, chairman of the Tea board, the Government does not think that so much additional land (roughly 75 per cent of the existing area under tea) or finance on so big a scale as Rs 1.5 to 1.6bn will be needed to achieve a production target of 1,400m kilograms by 2000. Mr. Goswami believes that tea productivity can be doubled to an average of 3,000 kilograms per hectare in two decades by better organisation and management of resources and by greater use of technology.

He knows of tea gardens which have a yield of 4,000 kilograms per hectare and they are by no means exceptional cases. Some new land would need to be brought under tea plantation, but not 250,000 hectares, he says.

The industry does not believe that it will be possible to double productivity per hectare in 20 years. The present level of 2,500 kilograms per hectare on average, is the highest in the world and this represents only a 50 per cent increase over a 20-year period during which an intensive effort was made to obtain higher yields. In any case, tea production is an agricultural operation and the crop is always at the mercy of the elements irrespective of the technology employed. For example, the crop in 1978 slipped back to 547m kilograms from 571m in 1978 and 570m the year before, because of a prolonged drought that affected north India's tea gardens. No management, however capable or resourceful, could do anything about it.

This dialogue between the Government and the industry is certainly adding to the anxieties of overseas buyers who fear that India may attach less and less importance to exports because of the vast and growing domestic market. An official committee on tea marketing, in the course of its visit to Europe last year, found considerable anxiety among buyers about India's future policy and intentions concerning tea exports.

The committee reported: "While India was eager in the past to develop its tea exports, it is now wondering abroad how far it will be able to resist the growing pull of its home demand, helped by the attempts to keep down tea prices at home and insulated from the prices abroad."

The committee was appointed

by the Janata government whose restrictive policy towards tea exports leading to quotas and an export duty had caused such fears to arise in the minds of overseas buyers long accustomed to see India not only as the largest source of tea supply to the world market but also a very dependable source.

However, before its fall that government itself had withdrawn all restrictions on tea exports and was even anxious to push up exports during 1979-80 to at least a level of 220m kilograms. Disruptions to operations at Calcutta port and frequent strikes by tea warehouse workers have got in the way, and no more than 200m kilograms are likely to be exported during the current financial year.

The present government of Mrs. Indira Gandhi has already declared itself in favour of maximum tea exports—as it wants to maximise exports in general. No other policy would make sense in the current context of better world oil prices.

Moreover, it would not be in

the interests of the tea industry or the country if exports were cut or were reduced drastically under competition from home consumption. Tea exports are a major source of India's foreign exchange income, and they provide nearly 50 per cent of the tea industry's revenue.

In good years such as 1977-78, exports comprised 65 per cent of the industry's total income in that year. No sensible government can ignore these realities. If the industry were to stop exports or cut them drastically,

tea prices in the country would be very much depressed as export prices by and large guide the prices at home, and that would certainly affect the industry's financial health.

Influential people, not only in

the industry but outside, would like the country to go all out to capture as big a share of the world tea market as it can.

The world market is growing,

which is evident from the fact

that while India has been ex-

porting 200m kg annually on

average for many years, her

share in the world tea exports

has progressively declined. With

200m kg in 1978-80, the share

is just 28.1 per cent, but by

1985 when India, according to

an official projection, may be

exporting about 260m kg, the

share would drop to 26.7 per

cent.

P. C. Mahanti



Threshing jute in Bangalore

# Jute production may need to increase

THE INDIAN jute industry is no longer enjoying the super boom that it did during the second half of 1978. It also feels shaken by the levy of a stiff export duty on hessian, one of its lucrative items, yet the outlook remains basically healthy.

There are two reasons for this optimism, both of which are of fundamental importance to the future of this crisis-prone industry.

The first, of course, is the recently hefty increases in OPEC oil prices. These have made petroleum-based synthetics totally uncompetitive with jute, especially in Japan and Western Europe. In the United States also, synthetic manufacturers have come under severe cost pressures, and their prices generally are now less competitive with jute than was the case only a year ago.

In the circumstances, the Indian jute industry should have little to fear from synthetics on straightforward commercial terms unless its own prices rise abnormally high.

The second reason for the cheerful outlook is an encouraging expansion over the years of the internal consumption of jute goods. The domestic market now absorbs as much as 60 to 65 per cent of the total output.

With the projected develop-

ment of cement and fertiliser industries and agricultural production promising to remain at a high level the domestic market for jute goods is certain to expand further. It may then become necessary to increase the jute industry's capacity to produce more to meet both the internal and export demand fully.

Jute goods production has averaged about 1m tonnes in recent years. Unless extra demands from domestic buyers are met from new production, this would necessarily cut into the exportable surplus. However, some new mills are coming up outside West Bengal, in Orissa and Andhra Pradesh, which will be commissioned in the near future. It is likely, therefore, that 35 to 40 per cent of the output will continue to be available for export.

## Foreign market

At one stage, India exported 85 to 90 per cent of its jute goods production, but has come down to 35 to 40 per cent now. It has all but lost the foreign market for sacking which accounts for more than 50 per cent of the total output.

Had the domestic market not

been absorbing practically the whole of this sacking production, the jute industry would

have been in a state of

perpetual disequilibrium. Yet exports are vital for the industry's financial health and in fact for its very viability.

Goods such as carpet backing and hessian that are exported are high-value products for which also there is no domestic outlet yet.

With export prospects now brighter than ever before, the industry is showing a measure of self-confidence. Mr. Lalit G. Toolsidas, chairman of the Calcutta Jute Fabrics Shippers Association, says that there is an impressive demand for jute manufacturers in overseas markets. Another leading jute manufacturer, Mr. P. K. Kanoria, feels that "there is ground for guarded optimism about market conditions over the short term."

The demand has been

increasing from all foreign sources, but significantly,

Australian wool interests, the Japanese motor car manufacturers and even the primary carpetbacking market in the U.S.—a market Indian jute goods have long lost to synthetics—are now showing a keen interest in Indian gunnies again.

In Mr. Toolsidas's estimate, Indian jute goods exports during 1979-80 may

reach the relatively high figure

of 505,000 tonnes, as against

only 250,000 tonnes during 1978-79.

However, the imposition of a stiff export duty of Rs 1,000 (nearly £55) a tonne of hessian may scare away foreign buyers from a producer who has been in exceptionally good demand this year. The importers may

now turn to Bangladesh which is aggressively competing with India. Worse still, such buyers as have booked their requirements forward well before the levy may now back out because of the obligation to pay a heavy amount of duty they have not

contended for.

Whatever may be the Government's justification for imposing a levy on exports—to mop up excess profits or any other—export duties have always acted as a deterrent or brake on export promotion, especially for a commodity which has to sell in a highly competitive market such as jute.

In 1970, jute goods exports slumped when export duties were levied on all principal items. It remains to be seen whether history will repeat itself in the case of hessian now.

Whatever may be the eventual impact of the export duty on foreign demand, the Government should learn from past lessons and follow a stable export policy. According to reports, New Delhi is thinking

of setting up a jute goods export promotion council to regulate the industry's export affairs which will certainly be a good thing.

Such a council will at least eliminate a lot of harm that excessive speculation is doing to India's jute goods export trade.

An important matter that hitherto has been tackled half-heartedly but now deserves to be taken up in earnest is modernisation of the manufacturing equipment. And with the Government having set up a fund from which the industry can borrow on soft terms for modernisation purposes, a full-scale effort to update the equipment and the technology needs to start right away.

## Serious difficulties

However, the industry sees two serious difficulties in the way. First, there is organised, or even militant, opposition by labour (with full backing from the Marxist Government in West Bengal) to any move for rationalisation of the workforce that modernisation will most certainly involve. Secondly, there is a dearth of suitable machinery at home, and unusually long delivery periods for the machinery available.

Only the Government can help the industry out of such difficulties.

At least the industry is currently free from its raw material worries which are usually there in times of prosperity. The crop this year is much better than expected, following a bumper one in the previous year, so there is plenty to go round and indeed there will be a substantial carryover for the next season.

Consequently, the usual seasonal increases in raw jute prices which take place between March and April are not there. On the other hand, the raw jute price in the Calcutta market has been ruling at a fairly low level throughout the season.

It needs to be noted, however, that while the prices of jute goods have moved very high—they are still high despite the falls which have taken place since the beginning of this year.

Raw jute prices have been stagnating in Calcutta, and are very erratic at production centres.

So this has not been a good year for the growers. They should not feel penalised for producing an above-average or bumper crop and there is now pressure on New Delhi from many quarters, including influential political ones, to take quick and effective measures to ensure that the growers—numbering about 3m, all in eastern India—get a good price.

P. C. Mahanti

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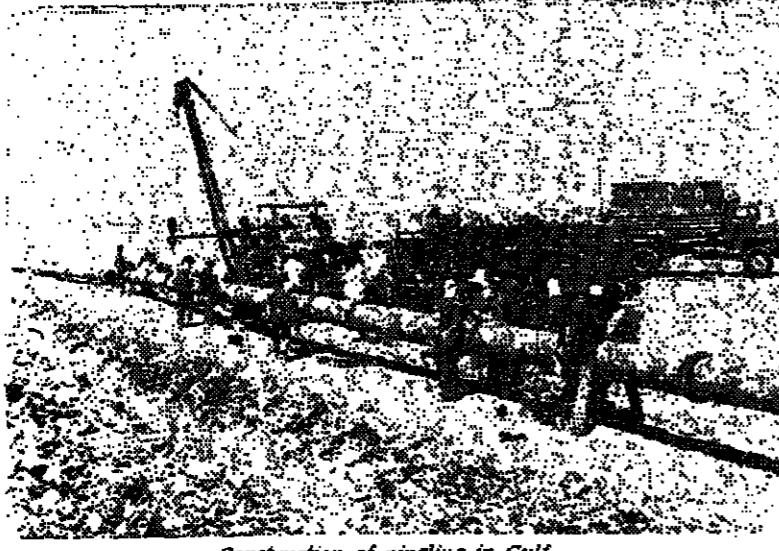
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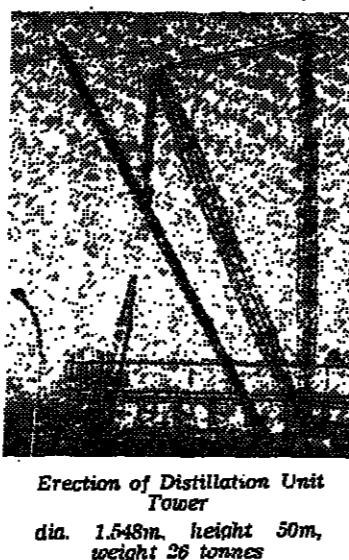
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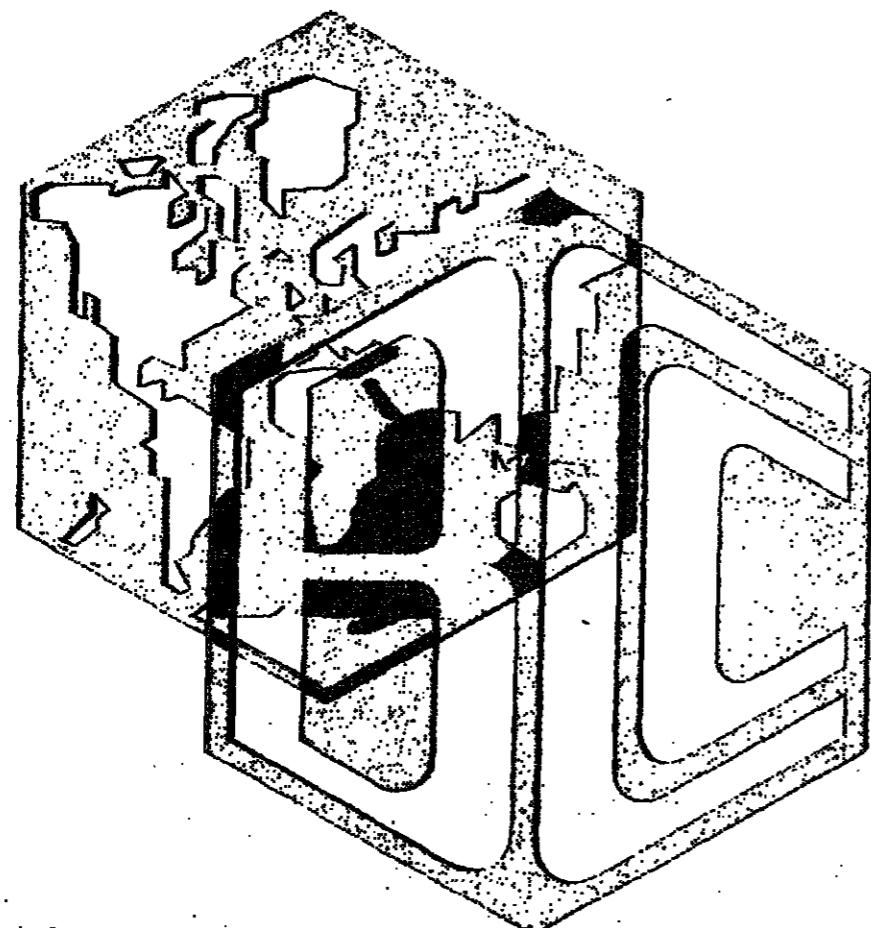
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## RAW MATERIALS/AGRICULTURE

# Japanese contract keeps iron ore exports buoyant

SMALL BARGES, their decks almost level with the water, sail slowly down the Mandovi river in Goa carrying high-grade iron ore to bulk carriers waiting in the harbour.

But at Visakhapatnam, the main port of the southern State of Andhra, the outer harbour has been enlarged to enable the carriers to come closer and be loaded by new modern mechanical conveyor systems.

These are just two examples of the manner in which nearly 22m tonnes of iron ore, mined in nearly 390 places in India, is exported annually through 10 ports.

India is now the fifth-largest exporter of iron ore in the world and recently won a 19.4 per cent mark up from Japan in price. This is important, since despite the slowdown in world economic activity and the steel industry, Japan has still found it necessary to revise its long-term agreement with the public sector Minerals and Metals Trading Corporation (MMTC), which exports nearly 60 per cent of the total from India. Last month the Japanese agreed to pay a higher price from the Baillala mines for ore that is of a similar grade exported by Australia, even though India's efforts to set up an iron-ore exporting countries association on the model of OPEC has not succeeded.

This will help considerably the National Mineral Development Corporation, the public sector company that is developing the Baillala mine in Madhya Pradesh. The new long-term contract with Japan envisages the export of 7.8m tonnes annually, including 1m tonnes of fines for the first time.

It has also been possible to tie up arrangements for iron ore exports from the Donmalai mine in Mysore, Karnataka State in the south. MMTC would be in a position to increase the exports considerably if the facilities at the ports were better, especially in the Visakhapatnam outer harbour which caters exclusively to Japan's needs. It is hoped that after an investment of Rs 80m (£4.4m) in the next three years, the port will increase its capacity and exports to Japan will rise.

There is a perennial argument in India about the desirability of exporting iron ore as

against value-added items such as pig iron and steel. Indeed, the recent projects for shore-based steel plants were evolved on the basis of this thinking and exports of finished products from these will go to Russia and France. But setting up sufficient capacity for steel building requires more funds and time to make use of the estimated reserves of around 186m tonnes that India has and so the argument has really settled itself.

The reserves are ample and India badly needs the foreign exchange that exports of iron ore fetch. Although customers abroad for Indian steel are still to be sought, provided they fund the establishment of the plants to make it, iron ore exports will continue in as much volume as India's limited port capacity allows.

The reserves are ample and India badly needs the foreign exchange that exports of iron ore fetch. Although customers abroad for Indian steel are still to be sought, provided they fund the establishment of the plants to make it, iron ore exports will continue in as much volume as India's limited port capacity allows.

MMTC, which exports all iron ore except that from the Goa mines, says that in extraction metallurgy, Indian ores—whether limps or sinter from fines, and pellets from pellets—prove to be easily reducible and least decrepitive. The grades exported have a wide range—from 35 per cent iron to close to the theoretical maximum (70 per cent in the case of hematite). India exports all four types of ore-lumps, closely calibrated-sized ores, fines and pellets, although the principal variety is hematite.

Iron-ore goes out to the world through 10 ports along the eastern and western coasts; increasingly they are being equipped with highly mechanised facilities and are capable of handling large-sized bulk carriers. But it is acknowledged that the facilities are not being improved fast enough for India's ambitious plans to export 50m tonnes by the mid-1980s, although deep-draft ports capable of accommodating up to 100,000 dwt vessels with loading facilities up to 8,000 tonnes an hour are being constructed.

Huge mechanised mines are in operation at Baillala, Redi, God and Daitari. More are coming up at Baillala, Donmalai and Kurnemukh. Mines in Barajamada and Bellary-Hospet sectors are mostly still semi-mechanised while studies are in the advanced stages to work the deposits at Malangtoli, Bahuband and Meghamabupur.

Plans for setting up pelletisation facilities are being drawn up for Goa, Bellary-Hospet, Baillala and Barajamada sectors to satisfy those who want value-added items to be made.

Nevertheless, Iran has at least decided to go ahead with the \$830m project even though it is \$240m in arrears (payments were to be made in instalments as the project progressed).

Under the original agreement, Iran was to begin receiving first shipments of iron ore concentrates from Kurnemukh from next August.

The Kurnemukh Iron Ore Company, especially set up for the project, is ahead of schedule and, in fact, has asked Iran for the proposed rates of shipments by this unique operation, which involves reducing iron ore to slurry before it goes down a gigantic pipeline to Mangalore port.

Work has been maintained in accordance with the original schedule, because the Indian Government continued to provide funds despite the uncertainty created by Iran's default. Kurnemukh has agreed to supply 150m tonnes of iron ore concentrates over a 21-year period beginning this year. Iran agreed to accept 3m tonnes in the first year, 5m tonnes in the second year, and then 7.5m tonnes annually.

The massive project is almost ready to start shipments in August this year, as provided in the agreement. But the turmoil in Iran has meant that the steel industry there has not developed as planned and the contracted quantity of iron-ore concentrates are not needed. Hence, the agreement is to be renegotiated to accommodate the Iranians and the surplus ore will probably be used at a pelletisation plant to be set up at Mangalore with eventual customers elsewhere in the Middle East.

K. K. Sharma

## Priority for textile industry

### TEXTILE PRODUCTION AND EXPORTS

Year	Production* (in metres)	Exports† (Rs m)
1970	8,931	1,301.8
1971	8,577	1,263.4
1972	9,140	1,736.7
1973	8,908	2,653.3
1974	9,344	3,725.2
1975	9,247	3,095.3
1976	9,551	5,968.0
1977	9,568	6,050.0
1978	10,522	5,616.7

\* Of all textiles, both cotton and blended

† Of cotton textiles only

THE TEXTILE industry was assigned priority in the sixth five-year development plan and although the programme is under review by the new Government, the targets for textiles output are unlikely to be changed.

In the five years ended 1982-83 production of textiles is scheduled to rise by slightly more than 3 per cent per annum on average. An official working group, whose report formed the basis for fixing Sixth Plan textiles targets, has projected total cloth production at 12.2bn metres in 1983-84 against 10.52bn metres in 1978. The 3 per cent growth is expected to yield a considerable export surplus—in contrast to past years, when the increase in production was a marginal 1 per cent a year.

Besides the handloom sector (one of the three main components of the textile industry), which is to get official support to raise production to 3.7bn metres in 1983-84, the organised textile mill sector is to produce 4.8bn metres of cloth of all varieties, cotton as well as blended, five years hence. The third semi-mechanised sector, known as powerlooms, is to produce 3.7bn metres of cloth. For the handlooms, the 1983-84 target amounts to a 60 per cent increase over the 1978 level.

The policy of the Janata Government, in whose regime the targets were set, had laid emphasis on producing as much as possible by cottage and village industries as a means of maximising employment, especially in rural areas. But the average annual growth of around 3 per cent set for the organised textile mill sector is considered significant. Over the past four years the annual growth of output was less than 1 per cent for textile mills, which have been clamouring for a bigger share in the textiles

production.

The weaving capacity of mills has been frozen for several years as part of the tdr. The freeze has to some extent blunted the edge of competition in the international market. Difficulties in raising the weaving capacity have reduced the capacity of the textile mills to meet the changing needs of overseas customers. For instance, India does not have modern machinery to produce quality denims, leaving the field to Hong Kong.

Fierce competition in the international market, despite import quotas by developed countries, has made Indian textiles less competitive. Added to this is the limited modernisation of the ageing plant permitted by the Government, which is apprehensive about the adverse impact of large-scale textile mill industry modernisation on the handloom sector. Only 21 per cent of the total 207,000 looms are automatic. As a result, cloth produced is inferior and the cost of production is high.

### China threatens EEC market

INDIA IS bracing itself to meet the emerging Chinese threat to its textiles market in the European Economic Community (EEC) and the prepare the ground for a larger share when negotiations start in 1980 for fresh EEC quotas.

Exports of Chinese textile fabrics and their products to the Community are to double to 40,000 tons this year from 20,000 tons in 1978, according to a recent EEC-China agreement. A higher textile quota for China should not by itself be a threat to India as "cheap" textile imports from all developing countries are regulated. India has an annual 80,000-tonne textile quota for fabrics and ready-made garments and this is not fully utilised. Out of the 40,000 tons of textile fabrics (the remaining quota is for garments) India is allowed to export to EEC, shipments of only 22,500 tons (56 per cent of the entitlement) have been made in the first eight months of 1978. The quota is bound to be under-utilised with the pattern of demand for textiles in Europe shifting from cottons to woollens in the winter. On current reckoning, India would be able to fulfil at best 70 per

cent of the EEC quotas. In contrast, quota utilisation by China is better than that at India. For instance, China was able to use the 10,816-tonne quota for fabrics in 1978 and secured a quota for 31,000 tons for 1979.

India's concern over China's activities in the EEC stems from quality and competitiveness. In fabrics, the bulk of both the Chinese and Indian cloth exports to EEC consists of greys. Keen competition is also expected in household linen and cotton terry towelling. China has a well-developed textile industry with 275,000 automatic looms compared with 42,000 in India.

India's share in EEC textile imports has declined from 7 per cent in 1976 to 5 per cent in 1978 although the market as such has expanded. The Mediterranean countries have been the ones to gain. This is part of what an Indian textile exporter calls deliberate EEC policy to achieve a redistribution of "cheap" imports to benefit the newcomers.

At present, India is trying

not only to utilise fully the quota but also to retain the EEC market share.

R. C. Murthy

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Detarim APT-15 C



Indian companies are winning contracts abroad but at home development projects provide more work. Here a canal is being lined as part of a project to reclaim land, grow forests and provide water in Rajasthan. It has been partly funded by the International Development Association.

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## Foreign success for civil engineering

**KAMANI** Engineering Corporation of Bombay, leaders in high-tension transmission, says proudly that it has "virtually put a transmission girdle around the world." It says this with some justice since there are now millions of homes, villages, cities and industrial centres in over 18 countries which throng with electricity transmitted through towers and lines installed by Kamani, now the second largest tower manufacturing unit in the world with an average turnover of more than Rs 2bn (\$110m).

Kamani is a good example of the remarkable strides made by Indian civil engineering firms in obtaining contracts abroad, often edging out firms from developed countries. In the past year, Kamani has won turnkey assignments in power transmission worth about Rs 1bn. These include a Rs 85m job in Libya followed recently by a Rs 280m contract with the Electricity Corporation in Tripoli which involves laying a 350 km 220 kv double circuit transmission line in the Misurata area.

Indeed, Libya seems to be Kamani's favourite hunting ground since it is working on a Rs 145m turnkey job in transmission for the Public Electrical Works Company of Tripoli. This involves design, supply, construction and maintenance of 66 kv double-circuit transmission line for a route length of 310 km.

### Competence

After Libya, Iran. Here, Kamani bagged the Rs 350m Tabriz-Mazand second-line project 230 kv single circuit power transmission turnkey job which it considers prestigious since it is taken as a mark of faith in its competence and economy by the power project authorities. Kamani has executed a 150 km turnkey project of 115 kv d/a transmission line in Thailand. It is also taking part in a number of Indian power projects, including the first 400 kv power system in the country initiated by the Uttar Pradesh State Electricity Board which it rates even higher than the 500 kv transmission line towers it has sold to the U.S.

This pride is shared by a number of Indian civil engineering firms, including those in the public sector. Most of these are concentrating on the Middle East. The Projects and Equipment Corporation, a subsidiary of the State Trading Corporation, has also done well in Libya where it recently bagged a

Rs 400m order for construction of schools, education centres and housing projects on turnkey basis.

PEC is concentrating efforts on securing turnkey contracts abroad and is currently negotiating with Iraq, Nepal, Bangladesh and Indonesia, although it is actually falling behind its target.

In the first nine months of 1979-80 (April-December) PEC exports totalled Rs 195m and it hopes to achieve another Rs 100m by March. But the total of around Rs 300m is well below the target of Rs 560m it had set for itself. Infrastructure constraints, which have adversely affected exports of engineering goods from India, are said to be the main reason for the setback suffered by PEC.

In fact, there is a growing realisation that the booming market in the Middle East and other countries should be handled with care so that Indian companies do not tarnish a reputation that they are acquiring. The Ministry of Industry has made a substantial change in its approach to overseas projects by public sector undertakings, and has shifted emphasis from acquiring new contracts to completing assignments already in hand.

Many public sector undertakings are way behind in completing contracts. The example of Engineering Projects India (EPI), whose major turnkey construction contract in Kuwait is lagging behind and costing both the company and India heavily in terms of reputation, is one example that the country does not want to repeat. The final phase of the Rs 2.3bn Ardiva project being executed by EPI may be awarded to some other company and this is a major blow since it has not helped India's image. Officials are now on a repair job and hope to make good the lags.

There has been such a tug-of-war for turnkey jobs abroad that many Indian companies have been competing with each other. This undesirable feature is being sought to be rectified by naming "lead" companies for undertaking turnkey projects in the Middle East.

For civil construction projects, countrywide allocations have also been made among public sector companies. For instance, Engineers India Ltd. (EIL) will concentrate on petroleum refineries, petrochemicals, fertilisers, cement and paper. Bharat Heavy Electricals (BHEL) will be responsible for power generation and also be the lead agency

for composite projects for power generation, transmission and distribution in Libya (where Indian firms are involved in a variety of civil engineering projects).

Other "lead" companies include Hindustan Steel Construction, Engineering Projects India, Hindustan Machine Tools, The Projects and Equipment Corporation, the National Building Construction Corporation, the International Airports Authority and the Indian Road Construction Corporation.

That the need for such an approach has arisen indicates the seriousness with which the Government is going about the work of capturing contracts abroad and protecting the reputation of public sector companies. It is also hoped that by adopting the "consortium" approach—by which companies co-operate with each other in making bids—more successes will be achieved.

### Supervise

This effort is spurred by the success of Indian consultancy firms, now being increasingly used by the Middle East oil-rich countries and companies to supervise the work being done by firms from Western developed nations. Consultancy services fetched Rs 138m for India in 1978-79 compared to Rs 95m the previous year, an impressive 48 per cent rise. The Federation of Indian Export Organisations expects the figure to be higher this year because of the rise in contracts won abroad.

The Federation has been asked by the Government to coordinate promotional efforts in this field and it is both inviting delegations from abroad and sending Indian teams overseas to explore further possibilities. It has also constituted a working group to identify sectors where Indian consultancy services could be provided and to identify and analyse the strategy to be adopted for various projects sponsored and financed by regional and international funding agencies. The group will also study problems faced by consultancy organisations in their export efforts and suggest to the Government the facilities and incentives needed by them.

Consultancy is provided by about 90 public sector companies and another 60 in the private sector. Their operations cover such varied fields as financial management for shipbuilding and repairs, engineering services for fertilisers,

petroleum, power and hotel projects with nearly 15,000 qualified professionals working in more than 120 organisations.

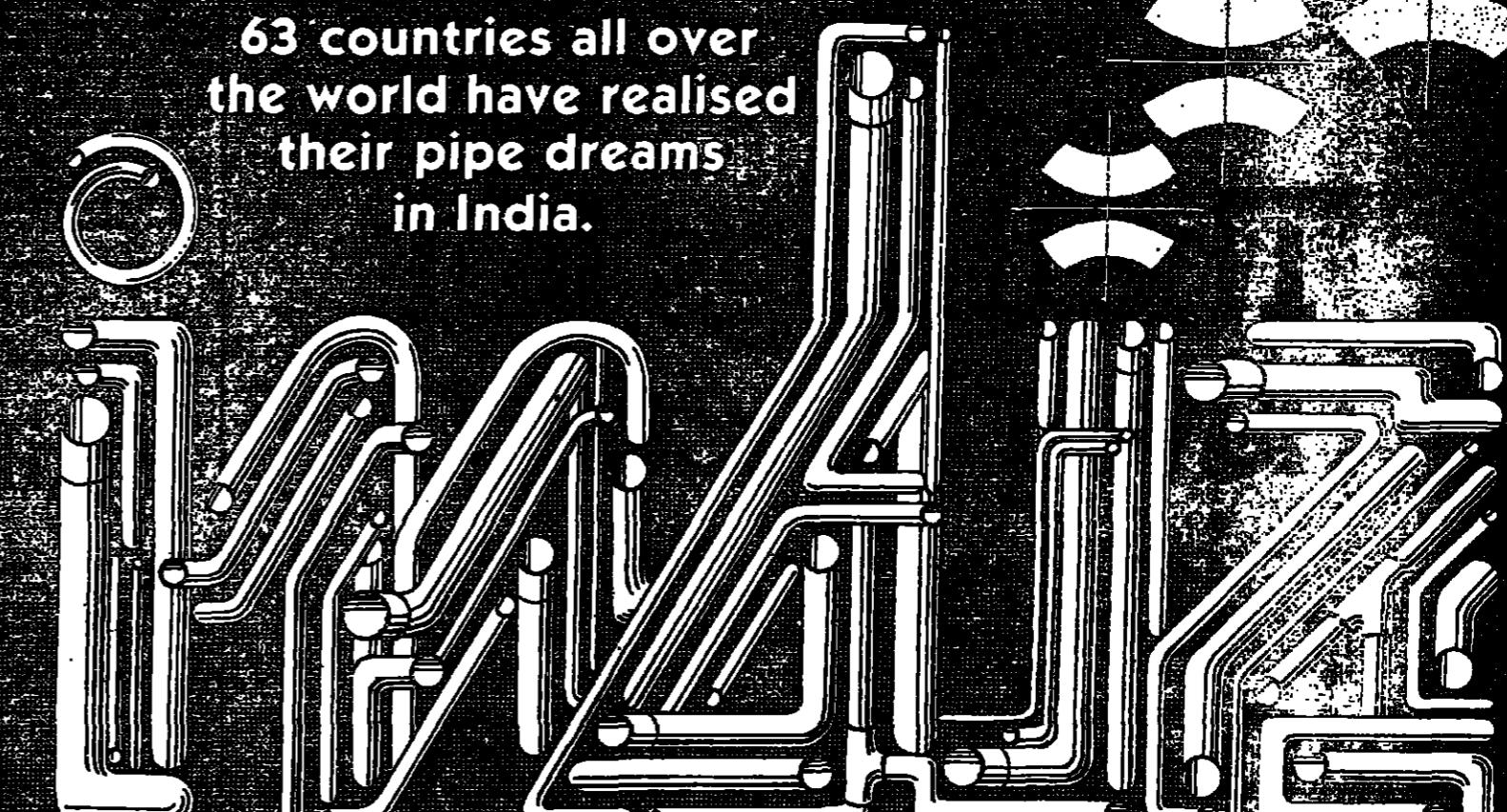
Indian firms are being helped to make bids abroad by provision of credit for overseas turnkey projects. Commercial banks are now authorised to sanction for small projects as much as Rs 10m at branch level so as to co-ordinate the credit sanctioned by the public financial institutions and export promotional agencies. Even this is considered inadequate, but Government procedures are notoriously slow, even in the export field.

Today, Indian consultancy organisations cover very nearly the entire spectrum of industrial and infrastructural activity

that, even though the total

K. K. Sharma

63 countries all over the world have realised their pipe dreams in India.



### SOME RECENT

#### MAJOR CONTRACTS WON ABROAD

**National Building Construction Corporation:** civil construction of 1,300 houses in Libya (\$112.5m). **National Building Construction Corporation for the Shuaib Sewer Works in Iraq:** (\$5m). **Builders International:** for construction of wholesale market centre in Qatar (\$9.90m). **Continental Construction:** for construction of dams in Libya (\$90m). **Continental Construction:** for drainage and sewerage scheme in Iraq (\$8.38m).

**Indian Road Construction** for building roads in Libya (\$17.50m). **Engineering Projects India:** for building a defence camp in Kuwait (\$100m). **Engineering Projects India:** for construction of a residential complex in Kuwait (\$31.25m). **Shah Construction Company:** for construction of a bridge near Khidir Iraq (\$5.75m).

**Bridge and Roof Company:** for civil work for purification and treatment plant of sewerage project at Najaf and Kerfa in Iraq (\$6.75m). **Engineering Construction Corporation:** for civil works for terminal building complex of new international airport at Abu Dhabi (\$35m). **Engineering Construction Corporation:** for consultancy and export of

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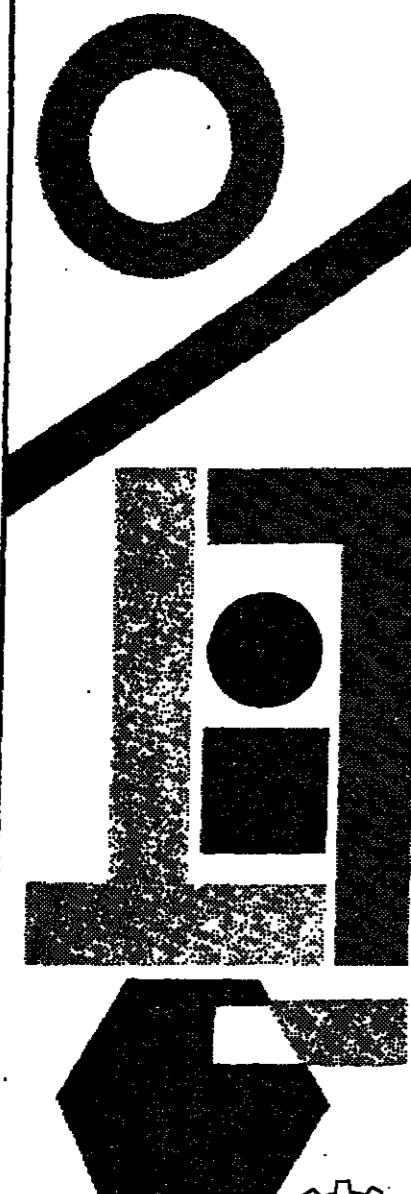
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## ENGINEERING

# Outlook for steel uncertain

INDIA'S STEEL industry needs a faster rate of growth in the 1980s than has been possible during the 1970s, if the country is to have an installed capacity of 24m tonnes of crude steel by the end of this decade. Mr. Pronab Mukherjee, the new steel Minister, has just said that this is his government's target for 1990, but has not given any clue as to how this target will be achieved.

Present capacity is about 11m ingot tonnes. If the major expansions at Bhilai and Bokaro, taking their capacity to 4m tonnes each, are completed over the next three to four years, then the installed capacity would go up to 15m tonnes by the mid-1980s.

Except for the 3.4m-tonne project at Visakhapatnam which is being set up with Russian help—which, incidentally, would mean that the Russians have helped build up two-thirds of the total steel capacity up to 1980s—there is no prospect of another greenfield site plant being built in the near future.

During the Janata rule there were reports of the British Steel Corporation, the Davy Ashmore group, and some German, French and Japanese steel companies showing interest in Indian steel projects, but nothing really materialised. The Steel Minister of that government, Mr. Biju Patnaik, often tried to bring in foreign technology and capital for export-oriented coast-based steel projects but his efforts were no more successful than the government or governments to which he belonged.

### Timetable

The new Steel Minister has been talking about "self sufficiency" in steel in the 1980s which should imply that one or two more steel plants will be built to take India's capacity to 24m tonnes by 1990. But the point to consider, therefore, is whether the new plants will be built entirely with indigenous technology and equipment.

Of course, India has built a strong technological base, at least as far as the steel industry is concerned, but if the heavy engineering corporation is to be entrusted with the task of making all the equipment for the Visakhapatnam as well as other new plants, a task which most probably will be assigned to it, then the chances of the steel programme following a timetable will become very uncertain indeed. The long delay

Bokaro steel plant is due largely to delayed deliveries of equipment from the heavy engineering corporation.

Thus the long-term outlook for the industry is rather uncertain. All talk of "self-sufficiency" in the 1980s notwithstanding. Even in the short run, the industry has come up against serious problems owing to poor infrastructural planning in the initial phases which have been forcing the industry to keep a substantial part of its capacity idle, thereby aggravating the steel shortage at home.

As one expert has put it: "To begin with, the problem was a dearth of adequately-trained managerial and technical personnel. Now it is the infrastructural insufficiencies which are posing all the challenges.

Poor foresight has meant that power planning for the steel plants has been the faintest of all. The major steel plants at Durgapur, Bokaro and Burnpur (Indian Iron and Steel) depend heavily on a single power generation agency, the Damodar Valley Corporation, which has been performing very poorly in recent months. This has hit these steel plants so hard that, often, rolling mills cannot roll all the ingots produced with the result that the plants are now having to carry disproportionately heavy ingot stocks.

Captive power plants have been sanctioned for Durgapur and Bokaro but these will obviously take time to be built, and they will be built at today's cost which is much more than what it was in 1970 when suggestions to build captive power facilities were made.

The coking coal problem is going to remain with the industry for a long while yet, not only because of the country's limited endowment but because of the inability of the railway system to transport the output from the mines adequately. The problem of more efficient generation methods and finding other solutions to the high ash problem remains, but if the private company Tata Steel has managed with Indian coal all these years why cannot the public sector steel plants do the same?

The Government's strategy now is to make the coal industry produce more and compel the railways to move coal to the steel plants and power stations on a high-priority basis. The Janata government's policy of importing low ash coal has been abandoned because of the high cost.

How the infrastructural inadequacies are costing the country heavily can be judged from the fact that the average rate of capacity utilisation in 1978-80 may not go higher than 60 per cent. During the past two years it was just a little more and the industry produced only 5.7m tonnes of finished steel in 1978-79. This has created shortages in the domestic steel market

necessitating imports on a substantial scale.

For 1978-80 the country has ordered imports totalling 1.9m tonnes and if the production rate does not improve significantly during 1980-81, it is hard to see how further large imports can be avoided.

Steel demand in 1978-80, according to Dr. P. L. Agrawal, chairman of the Steel Authority of India, is higher by 12 to 15 per cent than that of the previous year, and this bighrate of demand growth is expected to continue in 1980-81 as well.

In the circumstances, the use of electric-arc furnaces is being encouraged, to partially bridge the supply gap. Together, they have an installed capacity of 3m tonnes, but due to power and melting scrap shortages, are expected to produce only 1.5m tonnes of crude steel in 1978-80, the same quantity as in the previous year.

To get round the melting scrap problem, two sponge iron plants using the domestic iron ore and non-coking coal as solid reductant, are being set up. Negotiations are also going on with Indonesia to set up a joint venture there to produce sponge iron with Indonesia's natural gas and India's good quality iron ore. Part of the output will be brought back to India for use by the steel plants.

### Conditions

Some experts feel that technical conditions at the plants may not be as bad as the management's claim. The three public sector steel plants—Rourkela, Bhilai and Durgapur were set up nearly 25 years ago. If nothing else, arrears of modernisation in these plants must be considerable now.

According to the new Steel Minister, a programme of modernisation has been drawn up for the plants and the proposals are being considered by the authorities.

According to the Steel Authority of India, the country's equivalent of the British Steel Corporation, this modernisation programme is as much slanted towards improving the operational efficiency of the plants as to updating this technology.

India's steel technology is a blend of the old and the new and the idea now is to discard as much of the old as possible.

In Bhilai, the first Russian-built steel plant, the modernisation programme includes the introduction of LD converters, continuous-casting facilities and the key operations computerised. Thus some areas of steelmaking in India will be as modern as anywhere in the world.

As for the oldest steel plant in the country, the Tata Iron and Steel Company—which is still called the private sector of the industry as it is managed by Tatas though holding only 4 per cent of the capital—it too has a modernisation programme

on top of a renewal and replacement of machinery scheme which has been in operation for some time.

### Modern features

The main idea behind the modernisation programme is to replace part of the old steel-making capacity by a new 1.1m tonnes oxygen steel-making plant. There are other modern features such as continuous casting, but the centrepiece is the oxygen steel-making plant so that the works can make steel faster and thereby cheaper.

To finance the programme, the total cost is estimated at Rs 1,600m (Rs 880.444)—the company proposes to borrow abroad to meet part of the cost.

It is a pity that a highly efficient unit such as Tata Steel is not being encouraged to double its installed capacity to 4m tonnes—although this is what the company is well equipped to do and has been wanting to do. To put up a brand new plant on a greenfield site would cost many times what it would take Tata to add an extra 2m tonnes to its existing capacity, and in a much shorter time.

P. C. Mahanti

PROFILE : M. H. MODY

# Vigilant eye on Tata group

THERE IS a sharp little argument going on in India at the moment over whether colour television should be introduced. The Minister of Information and Broadcasting, Mr. Vasant Sathe, has urged that a start should be made, even if only in one city, and on an experimental basis.

His critics retort that such a step would be a pointless waste of resources. They reply that TV is, anyway, largely confined to the urban areas and has become a mere appendage to the Bombay cinema, catering for the lowest common denominator.

The argument is typical of the country's electronic industry. Many within it want to push forward the frontiers of knowledge but know that if they do they will only add to the country's social problems. No one is more aware of this dilemma than Mr. M. H. Mody, Burroughs, and some of the country's leading businessmen.

"This country," he says, "is full of entrepreneurs and if they were only set free they could do wonders for the economy. But bureaucracy sits on them and inhibits them."

"There is a strong demand for computers, for example, but it can take at least 18 months to get an import licence and as long as five years is not unusual. This is bureaucracy gone mad. Many companies which want to put in computers won't even bother to apply, knowing they have to face such delays."

Mr. Mody, an accountant by profession, is aware that in a country like India, the introduction of computers has to be undertaken with great social responsibility.

"When you have so much unemployment, as we do, and when we create work to employ people, you must be very careful about doing anything that leads to unemployment. The social cost of unemployment, after all, falls on the nation."

"But there are fields where you absolutely need computers. Later this year millions of enumerators will go out across the country to take the census. If the answers were not pro-

cessed electronically, we should not have the results before the next census in 1990. As it is, we do not even have all the results of the 1970 census, which has been handled manually."

"More clerical automation is not good for the country. Companies must be allowed to use computers selectively where the job could not otherwise be done."

It is a measure of Tata's confidence in the future of the country's electronics industry that it should have linked with Burroughs two years ago in a 50-50 partnership (unusual enough in a country that likes to keep foreign participation to 40 per cent). It is an even greater measure of its confidence that Tata should have given Mr. Mody the task of running the company.

Mr. Mody has been with the group for only eight years. But his training as an accountant helps him to keep a vigilant eye on the group's multifarious businesses.

He was trained in both India

and London, where, in 1956-57,

was a graduate student of the London School of Economics.

And he has one

other distinction: he is a chartered accountant in both

India and Britain.

Later this spring, Mr. Mody

certainly will merit the title of

the country's leading businessman.

Then he is to be made president

of the Associated Chambers of

Commerce and Industry of

India, a post roughly equivalent

to the presidency of the Con-

federation of British Industry.

This will bring him even more

into contact with the Govern-

ment.

Mr. Mody detects a change for

the better with the return of Mrs. Indira Gandhi's Congress Party to Government. "The Janata Government was very negative about big industry and automation. It was committed to modernising the economy.

It is a pity that a highly efficient unit such as Tata Steel is not being encouraged to double its installed capacity to 4m tonnes—although this is what the company is well equipped to do and has been wanting to do.

To put up a brand new plant on a greenfield site would cost many times what it would take Tata to add an extra 2m tonnes to its existing capacity, and in a much shorter time.

Anthony Moreton

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# Vehicle production lags behind

LIKE OTHER key sectors of Indian industry, commercial vehicles have been badly hit by infrastructural constraints and overall production is way behind installed capacity. Tata Engineering and Locomotive Company (Telco). The largest plant making commercial vehicles— with an installed capacity of 36,000 trucks and buses at Jamshedpur and Poona— expects to lose production of at least 6,000 vehicles in 1979-80 simply because of a shortage of power and similar difficulties.

This inevitably will hit exports since Telco has sales in more than 40 countries. Demand for its vehicles, initially made in collaboration with Mercedes-Benz but now totally indigenous and independently manufactured under the Tata brand name, is growing both at home and abroad. But its chairman, Mr. S. Moolgakar, complains bitterly of the considerable under-utilisation of capacity because the "power position is catastrophic."

Manufacture of commercial vehicles has been adversely affected, not only by power shortages but by the chain effect this has on their ancillaries

which are unable to supply components without which the finished product cannot be made roadworthy. Telco's own 300 suppliers of components have suffered. This is apart from the long 82-day strike last year at Micra of Bangalore, the only suppliers of fuel injection pumps for diesel engines and tractor units to the industry.

Mr. Moolgakar is sharply critical of the Government for its failure to tackle the problem of infrastructural facilities. He points out that half the price of what goes to the government in the form of taxes. However, hardly anything has been done to improve the conditions of highways and roads so that truck operators have to function uneconomically.

#### Energy saving

If even half the tax collections were used for improvement of the industry's infrastructural needs, says Mr. Moolgakar, not only would production increase but there would also be a considerable saving of scarce energy.

Demand for commercial vehicles is growing and the Indian manufacturers are unable

to meet it, both from India and outside. Hence the government's decision to allow expansion of existing units making them, although Mr. Moolgakar is again sceptical because of bureaucratic hurdles in the way of expansion.

He says that Telco was asked by the government itself to expand its capacity despite the Monopolies and Restrictive Trade Practices Act that bars growth of the established "large industrial houses." But then the Government delayed approval of the expansion it had itself sought and two years elapsed before Telco's present capacity of 36,000 vehicles was established. In the meantime, costs had escalated.

The government has now cleared plans in principle for expansion of Telco's capacity to 46,640 vehicles under the system of automatic growth of installed capacity notwithstanding the Act, which allows 5 per cent expansion annually to manufacturers of commercial vehicles. Telco could thus go up to 56,000 in the next five years at an additional investment of Rs 85m (£22m). The company is expected to issue convertible bonds for financing this, although Mr. Moolgakar proudly says that Telco has no problem of finding funds.

Additional capacity has been approved for other units also. The Government has just cleared Ashok Leyland's Rs 2.7bn scheme for increasing its production from the present 12,500 vehicles to 40,000 a year. This will involve setting up new manufacturing units at Karnataka, Maharashtra and Rajasthan states in addition to Ashok Leyland's only existing plant at Madras. The majority share in Ashok Leyland is held by British Leyland, the parent company.

The Simpson group, which holds a license for manufacture of commercial vehicles, is also to make Ford trucks which are to be imported initially. The collaboration with Ford has been approved. Manufacturers of lighter trucks like Mahindra and Mahindra, however, are not joining in the expansion programme since they have considerable idle capacity. Nevertheless, Mahindra and Mahindra is embarking on a modernisation programme.

This involves an agreement with Peugeot of France for

transfer of technology for a plant to manufacture modern diesel engines for their vehicles (which are mainly Jeeps). The new plant will involve an investment of Rs 160m and will manufacture 25,000 diesel engines.

Mahindra's present plant has a licensed capacity to make 25,000 vehicles but it is considerably underutilised since production is now just 13,500 Jeeps and 4,000 light trucks (the company also makes about 12,000 tractors, accounting for about 20 per cent of the Indian market).

The internal demand for commercial vehicles is increasing by 25 per cent annually,

despite fears that the withdrawal of the system of national permits to truck operators would lead to a marked fall in sales. One reason is the problems which have slowed down rail transport and this has encouraged increased use of road haulage.

#### Queues of trucks

The current diesel fuel shortage has given ample evidence of the popularity of trucks and buses. All along the highways are visible queues of trucks, often more than a mile long, on both sides of diesel pump stations waiting for the supply of their limited ration.

Going by the current level of production, the demand for commercial vehicles will undoubtedly outpace their availability (even after imports are taken into account) but there is no intention yet to curb exports because the Government does not want to lose established markets. Hence the emphasis on increasing capacity and production supplemented by imports.

Because of production constraints, the industry will not be able to achieve the target of 57,000 commercial vehicles set for 1979-80 which represents a 15 per cent growth over the preceding year.

Even during 1978-79 production of commercial vehicles, which attained an impressive 41 per cent growth with an output of 158,260 was still lower by 1,740 vehicles compared to the target of 60,000 vehicles set for the year. The total production of commercial vehicles in 1977-78 stood at 41,250.

K. K. Sharma



Making truck-tires at the Dunlop India factory at Ambattur, near Madras

## Breakthrough aids joint ventures

EARLY THIS year, Alusuisse of Switzerland agreed to float a jointly owned company with the Indian public sector consultancy firm, MECON, for the purpose of participating in turnkey contracts in three countries. This target is obviously the Middle East, where Indian firms have reaped an abundant harvest.

But the significance of the tie-up between the Indian and Swiss firm, which will result in a company to be named Indo-Swiss Engineering Company, is that not only does it represent the first link between a major company from a Western developed country and an Indian firm for joint bids but shows a recognition of Indian industrial capabilities.

So far, for the past several years, there has been much discussion between the developed world and the Indian Government on the desirability of such tie-ups. The argument is that, apart from the obvious advantage that India has in the form of low labour costs, the country has also developed appropriate technology that is suitable for the Third World.

Married to the technology and finance available with the Western world, this could result in mutually advantageous jobs in developing countries. But this has had limited success and, for the most part, industrialised countries have been content to allow a limited number of sub-contracts to Indian companies.

#### Pacesetter

The Swiss agreement is a breakthrough because, for the first time, the much-talked-about tie-ups between companies of the industrialised countries and India to operate in third countries has actually been translated into action.

The venture could prove to be a pacesetter. The new company will function mainly in the Middle East and MECON hopes to get a considerable amount of design work as a result. For instance, Alusuisse is currently negotiating with Libya for a Rs 80m alumina project and a major chunk of the design work as well as construction and engineering work will probably be done by MECON, which already has an international reputation.

It will also result in orders

for Indian companies since the agreement with Alusuisse stipulates that the "maximum possible supplies of equipment" will be sought from India. Alusuisse itself undoubtedly will expect to gain by using the cheaper technical personnel. MECON can provide to make competitive low bids for projects.

The breakthrough is important but so far it remains the only one, although similar ventures have been discussed elsewhere. But so far, joint ventures in which Indian companies have been associated are mostly those in which they have invested in other Third World countries.

#### Maximum use

Not all these ventures have been successful, not even in Malaysia where there is a heavy concentration. An exception is the Indo-Malaysian Engineering Company started by Kirloskar Electric of Bangalore and the reason seems to be the latter's conscious decision to make the maximum use of local capital and manpower.

Indeed, Kirloskar believes that most Indian joint ventures are mainly for the purpose of exporting value-added items without the intention of increasing progressively the local content. This violates the criteria for joint ventures allowed in India itself where the Government insists on Indianisation of both the equity and manpower.

Kirloskar is an example to follow since it went to Malaysia with the belief that "business is only for the tough."

Malaysia is a competitive market where, if any Indian joint ventures there have fallen by the wayside, it is because they are not getting the preferential treatment they are used to. Lacking Government backing, they fall to get off the ground and fall victim to what some consider is a ganging up by others.

Parry's of India, for instance, tried to set up a sweet plant in Malaysia. It failed because local businessmen allowed it no chance; and when it was forced to sell out, the Chinese buyers immediately got it going profitably.

Kirloskar has not had universal success and it speaks particularly harshly of the Philippines where it found it is

impossible to function without back-breaking pay-offs to local officials and businessmen. But it plans to start a trading company in Kenya and another in Malaysia.

In all cases they will follow the dictum: avoid using Indians locally and limit their participation to finance and supply of technology. Indeed, this is following guidelines set by the Government which believes that Indian companies have the appropriate technology for the Third World and encourages them to push ahead.

It has not always worked this way. In fact, one reason why there are so many Indian joint ventures abroad is that there are limitations placed on the expansion of the so-called "monopoly and large industrial houses" inside India and so they have been forced to look outside.

Towards the end of 1979, 53 joint ventures were launched by these large industrial houses.

This accounts for about 25 per cent of the total, while in terms of equity participation they accounted for as much as 74 per cent. Birlas tops the list with 14 units in production abroad, with a total equity participation of Rs 135m (£7.4m) and nine units under implementation with an equity participation of Rs 63m.

Thapars follows with six Tatas with four and J. K. Singhania with three. Like other joint ventures, most of their investment has been in the form of plant and equipment while fees for technical know-how account for 8 per cent of the investment.

Although restrictions on financial participation have been eased, they are still sufficient to limit actual cash investment to insig-

nificant amounts.

Joint ventures are mentioned repeatedly as part of Government policy, but by and large Indian companies have been slow to take these up unless they feel they have to in order to expand, or can make gains by exports. The corporate sector in India has had to sheltered a life inside India to really feel the need to look outside, although this is now changing slowly.

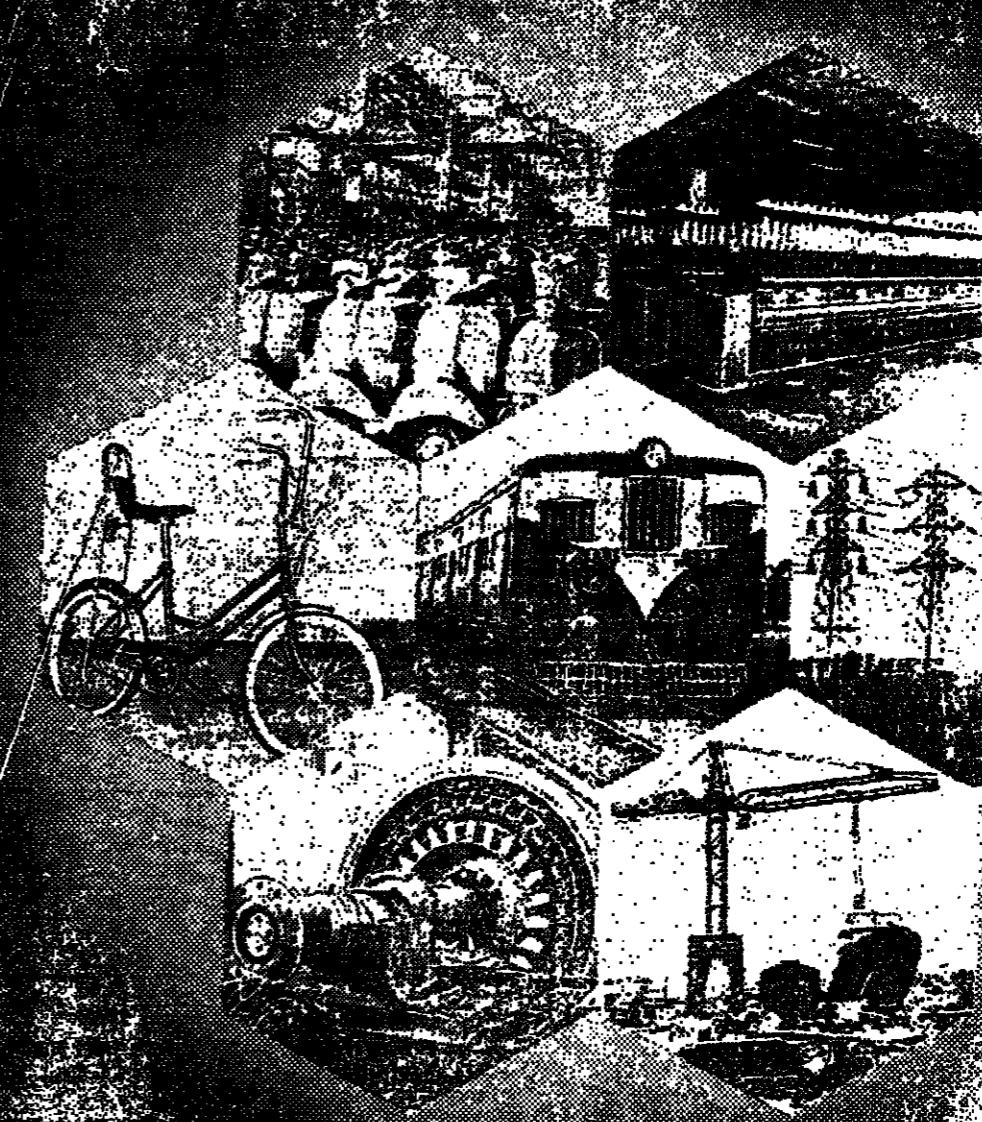
On the whole it remains true that the policy approach to joint ventures has been guided by computations of export development.

K. K. Sharma

# Focusing on capability

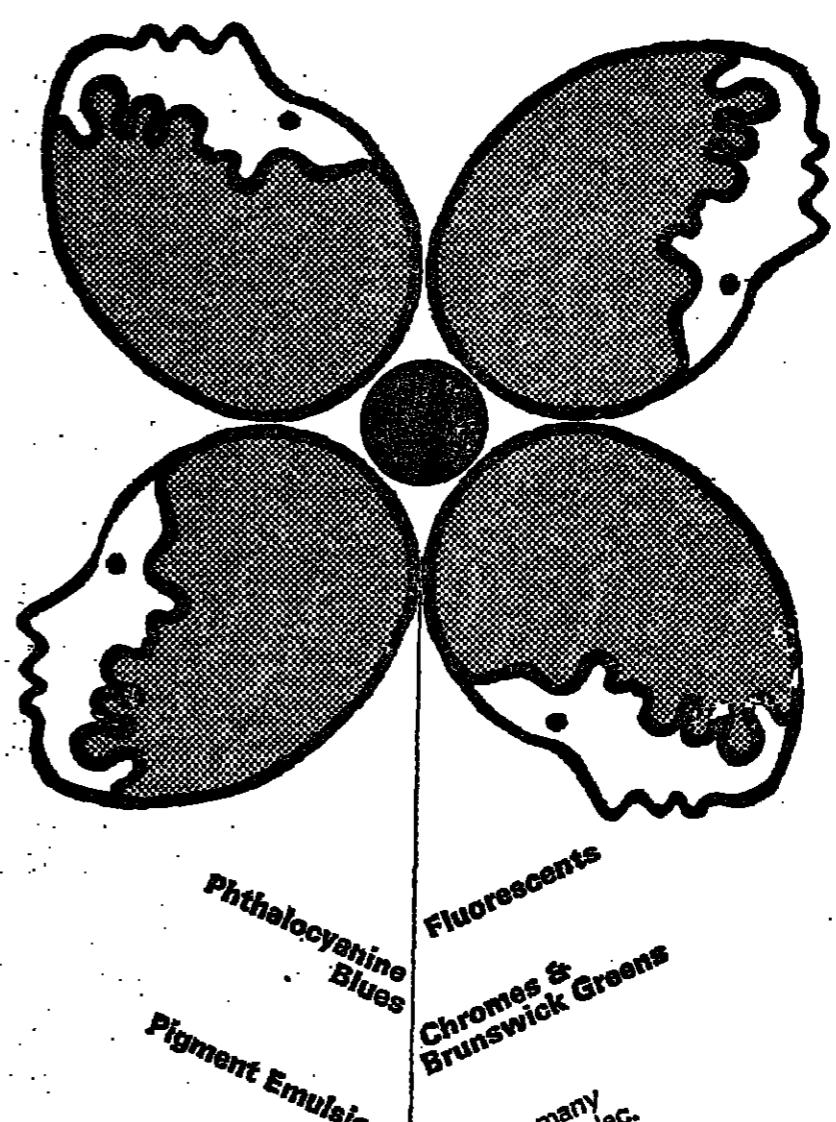
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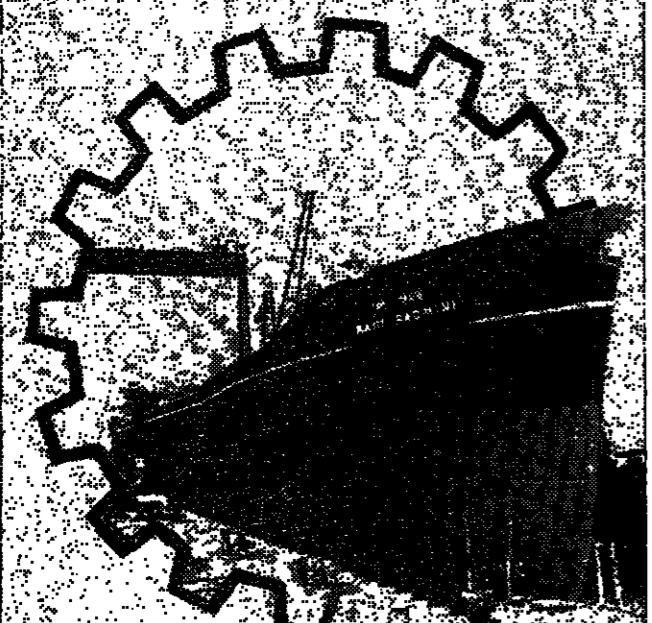


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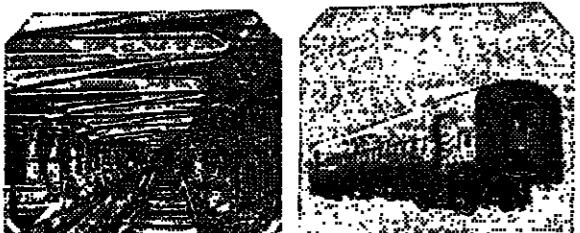
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## ENGINEERING

# Machine tools slip in world league

THE MACHINE TOOLS industry amply demonstrates the vast progress and the vast problems of India in the 1980s. Exports of machine tools have grown, but so have imports, to about twice the value of export earnings.

Total production and variety of India's machine tools have improved steadily, but the country has slipped down the international league to 21st position and has dropped below Taiwan and South Korea.

For all this, the Indian industry says there could be extra foreign orders for the taking if only there were more capacity, if the power supplies were regular, if new investment were encouraged, and if only decisions were taken quickly.

A key area such as machine tools tests the appropriateness of government policies. Small may be beautiful, but a machine tool maker can't build or develop without a good market. Monopoly may be harmful, but an Indian "monopoly" company is tiny on a world scale; yet it is on a world stage that machine tool makers must perform.

Import substitution can bring benefits but it also brings dangers in a rapidly-developing world of falling behind and continually having to import the latest, most sophisticated, and most expensive, machinery. Self-reliance is a good thing, but if pushed to extremes can cut a country off from new technological developments.

### INDIAN PRODUCTION (Rs 10m)

Year	Production	Import	Export	Share of production in consumption %
1955	0.68	5.28	—	11
1962*	10.4	26.04	0.11	29
1970	37.23	18.30	2.78	71
1975	104.3	44.05	8.18	76
1977	109.57	35.72	13.66	83
1978	121.05	40.00	20.50	86

\* First year in which exports were made.

Source: Annual report of Indian Machine Tool Manufacturers' Association.

## Capital goods benefit from

## international competition

THE INDIAN Government's decision three years ago to liberalise imports of capital goods sent shivers down the spines of managers of units making them in the country. Having been sheltered for nearly 30 years, there were fears that the high-cost capital goods industry would crumble in the face of international competition. A recent study shows that the fears were baseless.

Even in the power equipment industry, the main one in which imports were encouraged, it has been found that the bulk of the orders still go to Indian manufacturers with the possible exception of specialised equipment (such as gas turbines) that is not made in the country.

This suggests a strong case for throwing larger areas of the economy open to international competition, since many companies concede that the liberalised policy forced local units to lower their own costs and improve efficiency.

That the Indian capital goods industry has reached maturity is conceded by all concerned. It is now in a position to set up complete power projects on a turnkey basis (for example, by Bharat Heavy Electricals), build a wide variety of vessels for defence and commercial needs (Magazan Docks, Garden Reach Workshops and the like) and manufacture complete textile mills and sugar plants (Birlas and host of other companies).

### Single-minded

In fact, the capital goods industry, with a current annual output that is estimated at around Rs 20bn and which accounts for more than a third of the country's engineering goods exports, has produced nearly the entire equipment needed for building up infrastructure in the country. This was possible because of the Government's single-minded pursuit of a policy for nearly 30 years of import substitution and self-reliance (mostly because of the shortage of foreign exchange).

If now the major units of the capital goods industry, such as the Heavy Engineering Corporation at Ranchi, are suffering from heavy under-utilisation of capacity, it is partly due to infrastructural constraints but mostly because they were dependent for demand for their products on Government orders for railways, power, construction, ports and ships.

Imports of capital goods in 14 sectors (in which global tenders are now allowed) has not really affected any of them. They are: fertilisers; newsprint and paper; basic drugs; basic technical materials for pesticides and weedicides; power all units to produce to their

hands, the largest company is Kirloskar with machine tool sales of Rs 150m a year, followed by companies such as Cooper Engineering, Godrej and Alfred Herbert.

India's progress through import substitution has been substantial and today the country is more than 85 per cent self-sufficient. As an example of the success, over the last few years India's import policy has been liberalised; but as far as general purpose and standard machine tools are concerned imports have been few because Indian machines are available at competitive prices.

But now a plateau has been reached and new policies will have to be carefully considered, some of which may be in conflict with the Government's overall ambitions.

One problem is India's lack of economic growth. So far the order book has been good, to some extent because shortages of power, iron, steel and other raw materials have slowed production. But industry sources fear that machine tools are the first to suffer in recession and the last to recover, and predict that with the continuing oil crisis important machine tool users such as motor vehicle industry ancillaries will be badly affected.

In terms of the ambitions of the Indian planners, the machine tool industry seems to be falling behind. The official aim is to see capacity reach Rs 3bn and production Rs 2.5bn by 1983. Exports should reach Rs 750m, at least according to the targets. All of this looks optimistic today.

According to Mr. Sulakhe: "There has been hardly any new investment in the past two years in machine tools." New investment requires licensing and under India's cumbersome procedures that takes months if not years to accomplish. And with any company with assets of Rs 200m falling under monopolies regulations, progress can be even slower and more tangled in red tape.

Moreover, progress means new technology and this will almost certainly mean foreign collaboration or investment, pre-

sumption capacity without any conditions something that is not easy since it would require changes in the application of the policies towards the established large industrial houses and foreign companies. But this is urgently needed if costs are to be lowered.

There is currently a development of the capital goods industry because the engineer-

ing sector is in the peculiar position of being both the manufacturer and user of capital goods. The controversy is that indigenous manufacturers feel that much needs to be done to cut down on the cost of the vital inputs so that they become competitive; on the user industry side, the feeling is that good quality modern plants, that would probably be cheaper, should be imported.

CONTINUED ON NEXT PAGE

### WORLD PRODUCTION 1979 (Sm)

Country	Production	Exports	Imports
West Germany	4,100	2,450	1,650
U.S.	3,800	650	1,600
USSR	2,890	350	1,600
Brazil	240	32	1,600
Taiwan	170	120	70
South Korea	150	22	140
India	120	31	56

(Figures rounded; some include USSR estimates.)

Source: American Machinist February, 1980.

Machine tool exports are dominated by centre lathes which in 1978 were almost a third of total Rs 135m exports. They were followed by general cutting tools, radial-type drilling machines and power presses.

Industrialised countries, notably the U.S., West Germany, the UK and Australia, which each bought Indian machine tools worth Rs 10m, are the most important, though in the past few years some developing countries have come into the bottom of the export lists. These include the United Arab Emirates, Kenya and Iraq. Even so, the sheer volume of the industrialised markets will prevent any radical changes in the pattern of trade.

Within India there is a growing interest in the industry. Mr. Sulakhe said that the 1979 Interex exhibition was visited by 150,000 people, even with a Rs 5 admission cost to discourage casual sightseers. The attendance at the Chicago International Machine Tool Show is about 100,000. But the problem, as in the rest of Indian industry, is to turn the world's second most populous country into a bigger market.

Kevin Rafferty

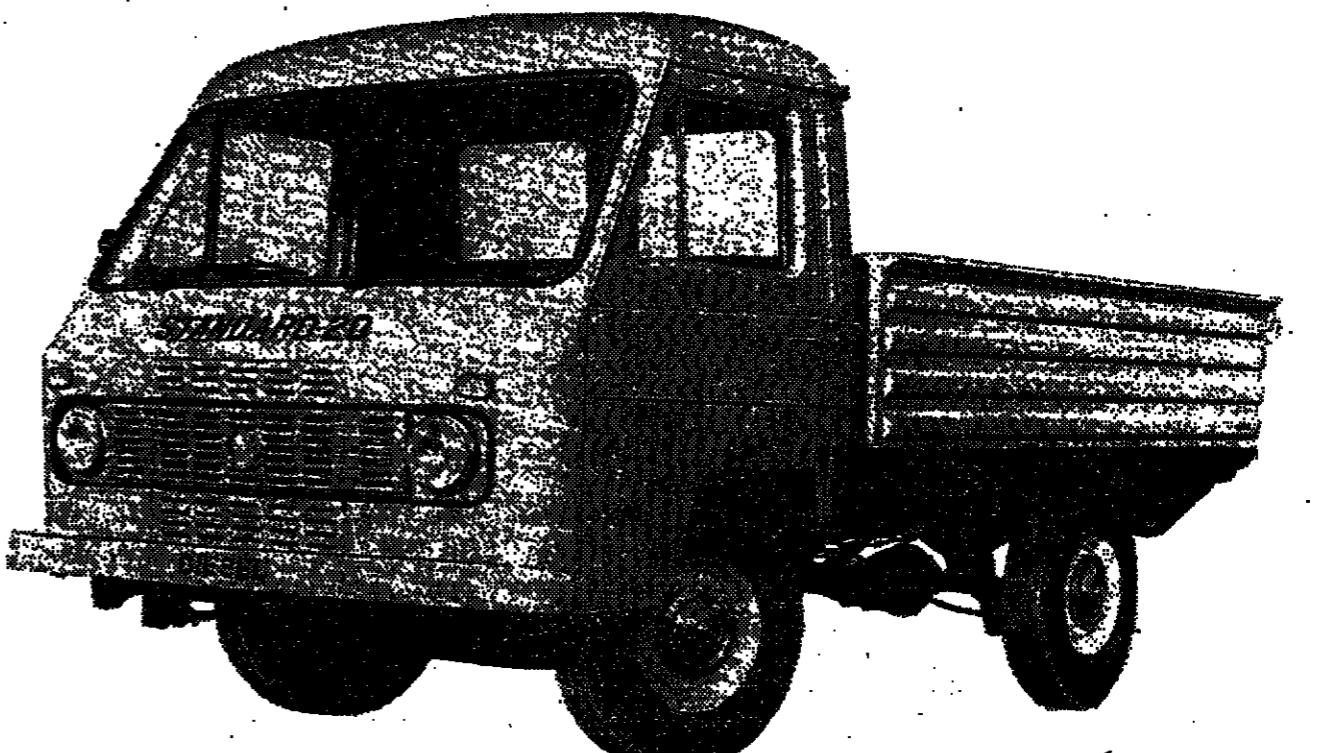
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Work at Bharat Heavy Electricals, Bhopal. The company has been seeking collaboration with Siemens.

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## Confidence in power equipment companies

INDIA IS groaning under unprecedented power cuts and the favourite target for the curses of annoyed industrialists and householders alike is the power equipment maker, Bharat Heavy Electricals (BHEL).

But while Indians profess their lack of confidence in it, BHEL has been winning favour abroad, and last year its exports reached more than Rs 1bn (\$120m), with orders from places as distant as the Middle East, South East Asia and New Zealand.

Making sense of the power situation, let alone the quality of Indian equipment, is difficult because so many judgments are coloured by emotion and anger at the power cuts and by sharp political controversy.

During the previous Janata Government BHEL came in for much criticism and there was growing talk of the need to look again at equipment and technology from abroad, though because of criticism BHEL's own plans for a 15-year collaboration agreement with Siemens were delayed.

But with the coming of Mrs Indira Gandhi's Government the judgment of BHEL seems to have changed almost overnight. Towards the end of February Mr A. B. A. Ghazi Khan Choudhary, the new Energy Minister, gave it what the company called "a clean chit".

### Decision

The new Minister also discouraged ideas of imports of foreign equipment. According to the Economic Times, the Minister said BHEL was quite capable of meeting the demands of the domestic thermal sector and he was against any kind of import of thermal units. His Ministry had taken a decision in principle to discourage any import of power equipment.

In this Mr Choudhary is showing a confidence in the public sector power equipment maker which is not shared by everyone. Senior industrialists are quick to point out that Indian power stations are working at only 48 per cent of capacity—compared for example to 75 per cent or above in the UK. The exceptions to the rule in India are significant. The long-

time British-owned Calcutta Electric Supply Corporation is doing well, even as the rest of West Bengal's power stations are doing badly; and the companies operated by Tata Electric, largely by using German equipment, are running at more than 85 per cent of capacity.

As an example of the state of the industry, Tata has been entrusted with the setting up of the first 500 MW thermal power station, for which the turbo-generator has been placed with BHEL but the equipment will be supplied by Kraftwerk Union and specifically made in Germany.

The Minister's statement laid the blame for the poor performance of India's power equipment not on the makers but on operational difficulties worsened by a lack of standard training for engineers, especially at the level of state electricity boards, plus "teething problems" of the new generation of stations of 210 MW. Other problems for which BHEL cannot be blamed are labour indiscipline and union rivalry in the power stations, demoralising patronage and favouritism in managerial appointments, the poor quality of coal and difficulties in moving it.

Yet the fact remains that there are areas where BHEL is weak and would benefit from foreign help. Indeed, by seeking collaboration with Siemens the company itself has acknowledged this. If the statement of in principle discouraging foreign power equipment becomes general government policy it will be hard for the country to get on top of the troublesome power situation.

Closing India to open competition would also destroy the boast of BHEL's commercial director, Mr. R. C. Bhargava, that "the U.S. and India are the only two power makers in the world which allow open global competition".

India is also one of the few really big markets in the world for power equipment. Installed capacity now totals 30,000 MW and the target was to add another 18,500 MW by 1983. It is unlikely that such an ambition can be realised, but the annual increases are likely to be considerable. Almost

3,000 MW was added in the last fiscal year. Mr. Bhargava predicts that this year and next the figure will be 2,200 to 2,300 MW, but this can then be stepped up to 3,500 to 4,000 MW a year.

In recent years BHEL has taken the lion's share of Indian power equipment orders. In 1978-79, for example, the company produced 2,363 MW of power generating equipment, and of the 3,038 MW added to India's power system that year, BHEL accounted for 2,360 MW or 97 per cent. This brought BHEL's share in India's overall power system to 36 per cent of the installed capacity.

But BHEL is now running up against some of its limitations.

The new generation of 500 MW power stations is beyond its experience, and its 210 MW stations have been having extended "teething problems". This is to be expected, and after all even a developed country such as the UK had huge problems with its new generation of 500 MW stations; but for a power hungry country like India there is a need to the smooth run possible.

### Useful resource

In stations assisted by World Bank loans, a useful resource to a country already spending 40 per cent of its development on power and transport, global tenders will be insisted on.

Mr. Bhargava says that international competition is healthy. "India had been a closed market until 1978. This means that we were not at all exposed to international technology. The need for technology upgrading was not before us and there was a great danger of our becoming totally inefficient. While we could get away with it, we don't want to get away with it." BHEL had entered the export market in 1976 for this reason, he said.

Mr. Bhargava is pleased that of the 1,800 MW of power station orders recently put out to international tender BHEL has won 1,200 MW. The other 600 MW, he adds, "is unlikely to come to us." Either Japanese or Italian companies will get the orders. British, American and German makers are too costly, he reckons, even with the most competitive world position for years.

"The export market has been very tough because of a decline in orders in the developed world. Most major power manufacturers except France and India have light order books. Prices of oil-fired stations have come down by 40 per cent over what they were five years ago, and coal-fired stations by 20 per cent. They are almost pricing to cover raw materials, fuel and bid towards overheads."

This stiffer international competition will probably mean that BHEL will be hard pressed to keep its exports at the \$125m level. When the present orders for Libya, Saudi Arabia, Malaysia, Thailand, Nepal and New Zealand are completed BHEL still has a number of foreign contracts—but not of such good quality."

Indeed, according to Mr. Bhargava, BHEL has already lost the opportunity of good orders in Saudi Arabia. Libya, where it has instead joined a consortium because of the delay in starting the Siemens collaboration and improving its technology.

Competition is also helping BHEL to reassess the areas of its strengths and weaknesses.

As might be expected, BHEL has an advantage where Indian technology is on a par with world standards and where the labour content of the goods is high. This means that in boilers, built since 1971 under a collaboration agreement with Combustion Engineering of the U.S., BHEL can secure as many orders as we like subject to the constraint of capacity."

In generators, where there is a lot of winding work, BHEL has an advantage. But in hydro turbines Japanese prices are close to BHEL's. And in steam turbines and generators of 100 MW and above, Mr. Bhargava admits, "we do not have technology which is up to date."

Kevin Rafferty

## Capital goods

CONTINUED FROM PREVIOUS PAGE

With the Government's decision to liberalise some imports, there is pressure to extend the list so that the modernisation process is facilitated while the country's foreign exchange reserve position is sound. On the other hand, the policy has not been availed of (except in the power equipment sector) to the extent that is thought possible and there are some doubts over how far Indian industry itself is willing to look outside.

The debate continues on the basis that the capital goods industry is full of idle capacity within the country. The other view is that exposure on a selective basis to international standards and competition in the domestic market would help to improve the quality and price of Indian goods and therefore improve the capacity to export.

But there is unanimity over the view that imports should be freely allowed when there is a sudden upsurge of demand (again the power equipment example) or when there is need for a higher range of products for which capacity has not been established.

The AIEI study concedes that the indigenous capital goods industry is high-cost. But it puts the blame on the Government and its taxation policies

and points out that the principal reason for the high cost is the heavy excise and import duties on raw materials.

The cost of copper for an Indian plant manufacturer is almost 100 per cent higher than for its counterparts elsewhere and the same is the case with zinc, steel, stainless steel and the like. Bearings that are imported are subject to a duty of 150 per cent, alloy steel 75 per cent and all this adds to the cost of capital goods and inhibits orders for them.

Yet it is also true that some raw materials—like steel plates, sheets, structures, commercial and EC grade aluminium—are cheaper than elsewhere in the world.

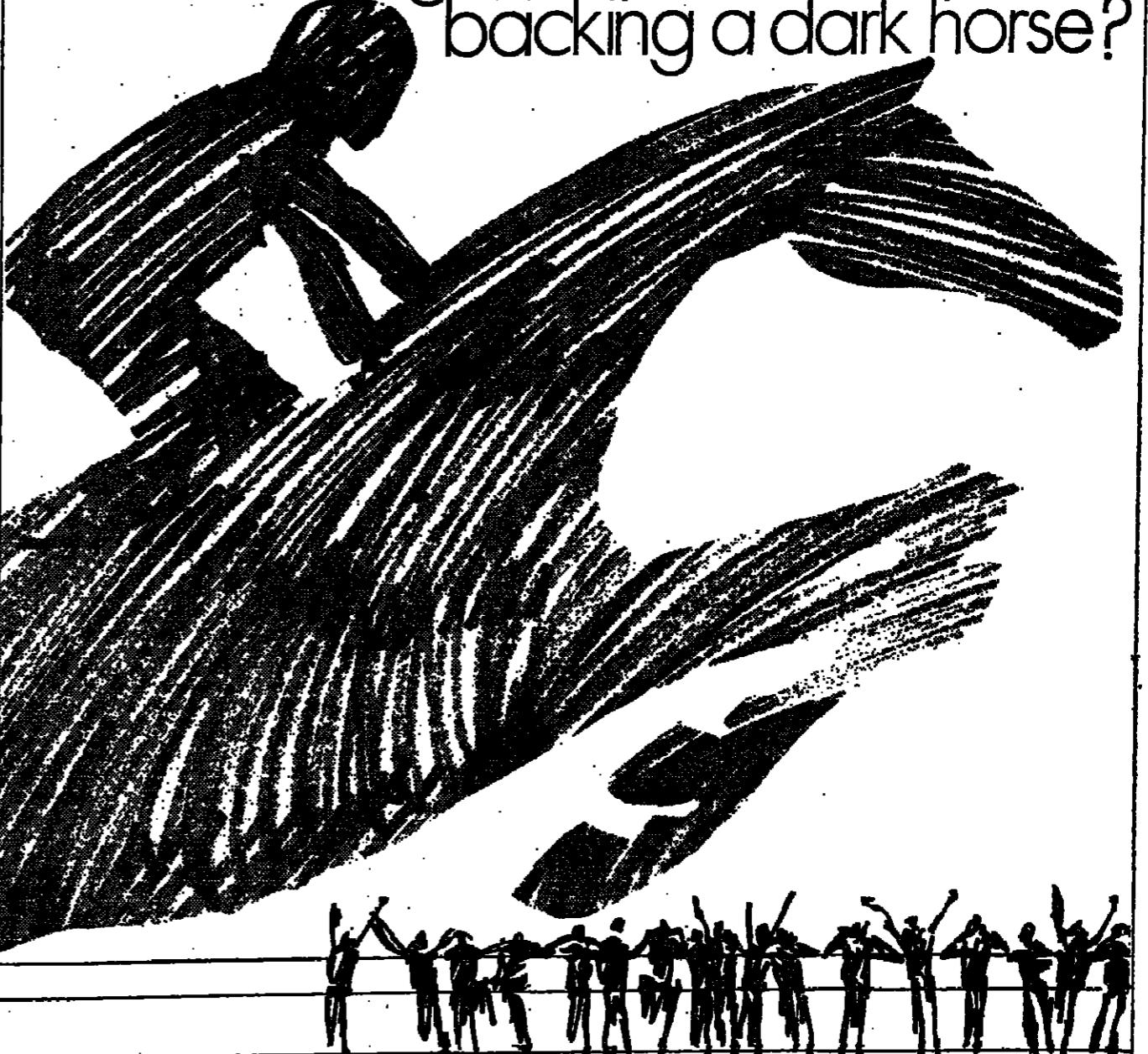
Eventually, it is likely that the debate over the import of capital goods will hinge on the degree to which Indian units are able to specialise.

The view is gaining ground that India should concentrate on manufacture of a few items in which it has natural advantages and that the emphasis should shift from earlier import substitution to export expansion with units having economies of scale.

This commands the view that Indian entrepreneurs should have within their range not only just India but the entire world.

K. K. Sharma

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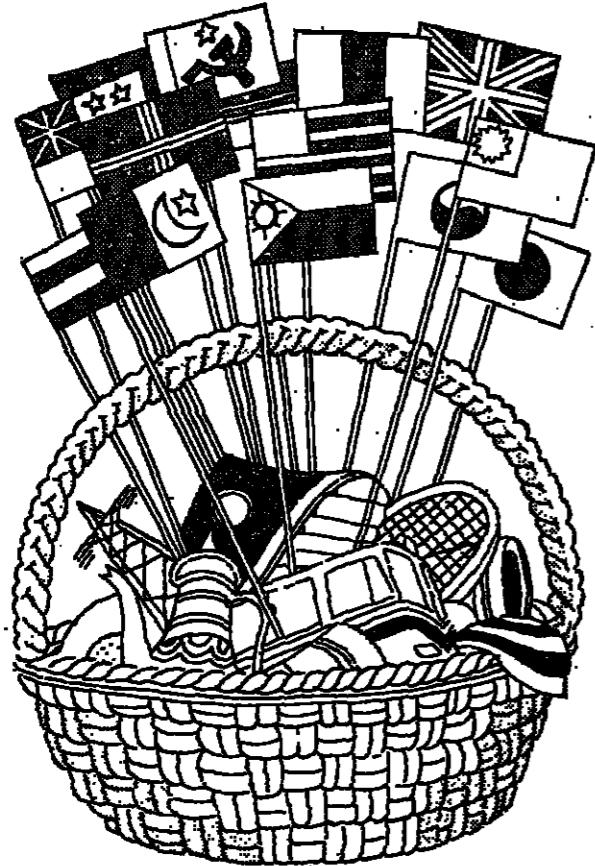
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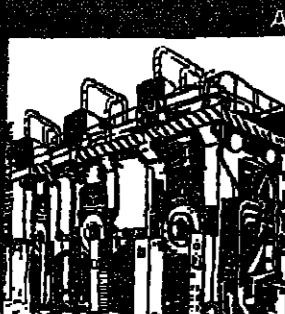
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ENGINEERING

# Electronics targets a mixed blessing

IF THERE is one industry that India would like to expand to world scale it is electronics. The ability to produce silicon chips, circuits, software and other equipment from television sets to guided weapons, is seen in the sub-continent as conferring great status.

What particularly irks India is that it has been left behind not only by the industrialised West—which is to a large degree understandable, given its present rate of development—but it also labours far behind many Third World countries in achievement. There is some pique that countries such as Taiwan, Hong Kong, South Korea and Singapore have all forged ahead.

There are now plans to boost home production of certain lines but achieving the targets may be a mixed blessing. Some of the targets are so grandiose that there is no domestic industry which could absorb the projected output.

India's problem is that its domestic market is small. While such countries as Switzerland have proved with watches that it is not necessary to have a flourishing home market in order to sell abroad, there is no doubt that most industrial countries do develop products at home and export on the back of this success.

Such a policy is difficult in India because of the low standard of living endured by so many of its people. It has been estimated that just over half the population of 634m has a standard of living below the poverty level. And the poverty level in India was put in 1978 at Rs 65 (about £3.50) a month in the rural areas and Rs 75 (about £4.15) in the cities.

With the wages of a farm labourer, for instance, ranging from 3p to 30p a day, there is not a great deal of scope for selling more consumer durables such as transistor sets.

India produces about 0.5 per cent of the world's output of electronic goods and accounts for about 0.8 per cent of world exports. Last year exports were worth £23m. By comparison, Japan, the world leader, sold abroad electronics goods worth nearly £500m and the combined overseas sales of South Korea, Hong Kong, Taiwan and Singapore reached £250m. This gives some idea of the magnitude of the problem facing India as it seeks a place among the world's leaders.

Bureaucracy

If the Government is serious about its intention of giving India a place in the sun there are certain things it could do immediately which would not cost a rupee. First, it could abolish some of the layers of bureaucracy which do so much to stifle business. An application to undertake almost any project has to be authorised up to half a dozen times by different organisations, with the result that a planning decision can take as long as five years to process.

The Government replies that it does not refuse all that many. But a long time gap between application and authorisation can play havoc with financial projections and inhibits business from even putting forward applications.

There is also a feeling quite widespread in industry that too little appreciation of the electronics industry is held within the Government. This is more a criticism of the Civil Service than the present Congress Party administration though

anxious glances are being cast at the policy on stimulating village industry. The previous Janata Government was thought to be biased against heavy industry and large-scale industry, wanting instead to boost production in the villages.

It is still not clear how far Mrs. Indira Gandhi, the Prime Minister, will go in reversing this policy. Village production is on much too small a scale to bring costs down in the electronics industry, with the result that India suffers from high-cost output in many fields. On top of this, there are heavy duties on imports, especially electronics goods, making their use in the country expensive.

Further, there is a feeling that the Government is antipathetic towards electronics, believing that high technology would aggravate the already serious unemployment problem and that, anyway, who wants more television or who wants colour television?

One sector that is exempted from this feeling is that part of the electronics industry which is producing for the defence sector. In the wake of the Russian invasion of Afghanistan and the American decision to re-arm Pakistan there is likely to be a fresh look at the needs of the country's defence forces. Much of its equipment is outdated; if it is to keep a modern army and air force then it will have to give them more sophisticated equipment.

India is certainly aware of its shortcomings. And it is considering what to do about them.

The Janata Government set up a committee to investigate the industry in December 1978, under Mr. Mamtosh Sondhi, Secretary in the Steel and Mines Ministry, and the committee's recommendation that the Electronics Commission should be replaced by inter-departmental boards caused something of a surprise.

It has been generally admitted that the Commission has held up the decision-making process. But the merit of the Commission is that it has scientists and technicians on its staff, and to replace it—and them—with more civil servants might compound the problems that people want to eliminate.

Concessions

The Sondhi committee took a bold view on imports, advocating virtually open entry of finished electronic products and technology and advocated further foreign investment in the country, as well as liberal tax concessions for the private sector.

Behind the setting up of the committee was a feeling that the private sector was being denied electronic components at cheap rates and that research and development were being held back. There was, in particular, a worry that growth in the components sectors was particularly slow compared with, for instance, that in electrical equipment.

The important factor now is the reaction of Mrs. Gandhi's administration to the report. The main recommendations run counter to the policy of self-reliance in science and technology which the Prime Minister has always urged. But the need for remedial measures are now so essential that it is possible Mrs. Gandhi will accept some of them.

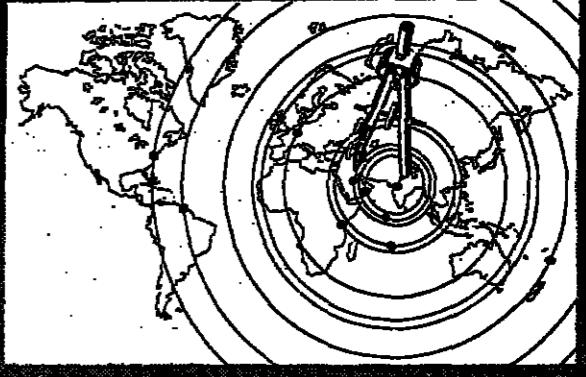
In one field considerable progress has been made. That is the establishment of a free-trade zone at Santa Cruz, outside Bombay.

The Santa Cruz Electronics Export Processing Zone (commonly called Seepz) was set up in September 1974 following a government decision four years earlier that electronics was an area where a high growth rate in exports could be achieved. There had been a free-trade zone at Kandala, north of Bombay, some years before but



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Concessions

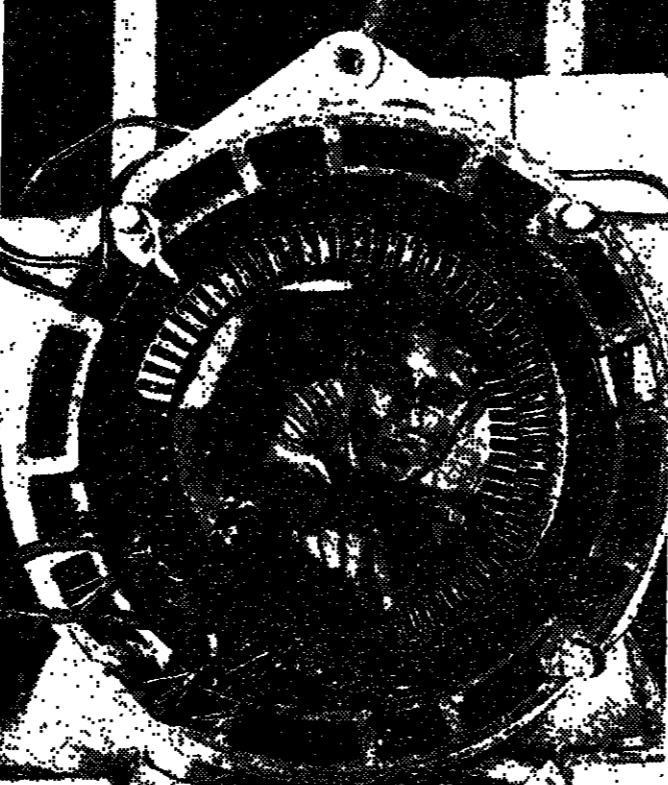
The advantages of a free-trade zone are that all the goods passing into it are free of import duties. There is a total waiver of licensing for the import of capital goods, exemption from customs duties on raw materials, exemption from any State or national taxes and special dispensations with regard to certain local laws.

The intention is that all the goods produced should be exported and so boost India's foreign exchange earnings. The country envisages 4.7 per cent growth in the sixth national plan between 1978 and 1983 and so India is looking for 7 per cent growth in exports.

Seepz's contribution so far is minimal. In 1979-80 exports from it are expected to reach about £5.3m and in 1980-81 they could go to about £6.5m. This will not contribute very much to the sixth plan.

But Seepz is a start. And it is a welcome move because for once the layers of bureaucracy have been stripped away and decision-taking can be reached quickly—within weeks rather than years. A more serious problem is that other industries have begun to ask why electronics should have been given such preference. This is the zone of problem that any government would welcome.

Anthony Moreton



Rewinding a motor stator at the ICI Alkali Chemical Corporation of India at Rishra, Bengal

## PROFILE : BHARAT ELECTRONICS

### Recognition from abroad

FOR BHARAT Electronics, the public sector undertaking with headquarters at Bangalore, the first breakthrough in exports came in the mid-1970s. After nearly a decade of catering mainly for the needs of India's defence forces, and the civil electronics industry, the company received an order from the Swiss group of Contraves for radar equipment worth Rs 350m.

The management was overjoyed. "It shows that we are recognised internationally in the field of high technology. Besides it shows that Bharat Electronics can function on behalf of an international corporation as a commercial organisation," says Mr. S. Krishnan, its finance director.

Launched in the 1960s essentially to supply India's defence forces with the electronics equipment needed for modernisation, Bharat has become a leader in the civil field as well. What began as an ordnance factory has become a modern commercial organisation with an annual turnover of more than Rs 300m.

The company now sells TV tubes and X-ray equipment and caters for Indian Railways and all the electronics needs of such departments as Post and Telegraphs, All India Radio, the police and civil aviation. The order book is more than full and the company is planning two new units at an investment of Rs 300m which will increase its capacity 50 per cent.

Half this capital will be provided by Bharat itself from its own profits, making it one of the few public-sector units

standing on its own financial feet. (Net profits for 1979-80 are expected to be about Rs 100m.) A quarter will come from the Government and the rest from a share issue. A further proposal for setting up a unit to make shells, involving an investment of Rs 250m, is being examined by the Government, which will provide all the finance.

Confidence

Bharat considers exports vital to its health. Apart from the fact that they improve its balance-sheet, it feels they generate confidence among foreign concerns in its capabilities. Many have approached Bharat to accept subcontracts; these include European groups like Contraves which want not only joint production but also co-operation in research and development.

The Europeans have won so many contracts from the Middle East (especially defence contracts), that they do not have the capacity to carry them out. Their search for a reliable foreign partner has led to Bharat. "The 1980s look very attractive for us," says Mr. Krishnan.

Bharat has developed all the modern communications in use in the Indian Army, Air Force and Navy. Its representatives are reluctant to disclose items but say proudly that they are being exported to the Middle East as well as to Europe. The latest is an order from Denmark worth Rs 80m.

K. K. Sharma

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## Drug shortage stems from price policy

INDIAN DRUGS are among the cheapest in the world, according to a recent study conducted by the Organisation of Pharmaceutical Producers of India (OPPI).

Despite the escalating costs of raw material inputs and packaging materials caused by OPEC's petroleum price rises, prices of end products have been rigorously held down by Government policy, resulting in an acute shortage of many essential and life-saving drugs.

The drug industry has been channelling for months now for the situation to be rectified. It points out that profitability of the industry and particularly the multinational drug companies, has come down steeply. This has had a major impact on new investment in the industry.

"A considerable expansion has to take place if the Government's production targets are to be met," said a producer of bulk drugs. "Today's output of bulk drugs is about Rs 2,000m (544.4m) and this must increase to Rs 4,750m in 1982-83 to satisfy requirements. This does not include imports of Rs 1,500m in imports by that date."

The current output of formulations is around Rs 10,000m (544.4m) and the Government wants this to increase to Rs 18,750m in 1982-83.

So priority is being given to the price question by the Ministry of Petroleum and Chemicals with the idea of encouraging higher production to meet future requirements. An announcement of bulk drug price increases is expected within the next few weeks. Formulation prices will necessarily have to go up as well.

### Guidelines

However, not all drugs will be subject to the same increases. Essential drug prices may still be artificially depressed while non-essential drugs are allowed large percentage increases.

Guidelines for the price increases were laid down in the 1979 Drug Price Control Order, which has still to be implemented. It allows for a 12.14 per cent return on net worth in the case of bulk drugs and an 8.10 per cent return on net worth in the case of formulations.

"This is almost the same

profitability obtainable in fertilisers, cement and other industries here," explains a drug industry source.

The level of equity foreign drug companies will be allowed to retain is also to be decided shortly. Much depends on how much their processes involve high technology.

Eight foreign firms manufacturing formulations and making no bulk drugs have been asked to reduce their foreign equity holdings to 40 per cent under the Government's new drug policy. These companies are Beecham India, Abbot Laboratories, Anglo-French Drug Company, C. F. Fulford, Indian Schering, Smith Kline and French, Nicholas India and Carter Wallace.

There are 24 foreign firms producing one or more bulk drugs. Studies of their 207 processes by the high-level Government Committee on Dilution of Foreign Equity, which was set up in April 1978, showed 93 involved high technology. Two of these 24 companies have been asked to bring down immediately their foreign equity to 40 per cent. They are Richardson Hindustan and Whiffens. Another company, Shubrid Geigy has already divested itself of its entire foreign holding.

There are 21 companies left, including giants like Glaxo, Sandoz and Park Davis, where permissible levels of foreign equity have still to be decided.

The Government Committee on Equity Dilution, looking to the future, has laid down general guidelines for assessment of drug technology for when foreign companies apply for industrial licences. The major objective appears to be the eventual Indianisation of all foreign drug multinationals.

India, in fact, has come a long way since the 1940s, when most of the bulk drugs were imported and only processing and formulations were carried out in the country. Now most of the bulk drugs are manufactured indigenously and India ranks second to Brazil in drug production in developing countries.

However, per capita consumption is still half that of many developing countries.

\$18 compared with China's \$3.

"This is a poor country and

for instance, or Malaysia's \$4.27."

To reduce bulk drug imports and encourage orderly development of the industry, two public sector projects were set up—Indian Drugs and Pharmaceuticals Ltd (IDPL), which now accounts for 40 per cent of the country's production of basic bulk drugs, and Hindustan Antibiotics. The public sector now provides about 20 per cent of the total bulk drugs and formulations produced in the country.

"Although all the top Western drug manufacturers were here, they were mostly producing the formulations," explains IDPL's chairman and managing director Dr. K. L. Behl. "IDPL filled the gap in production of bulk drugs."

Today, the public sector provides less than 10 per cent of formulations, but expansion plans are being put into effect to double this market share.

### Dominant role

The Soviet Union played a dominant role in providing technology for the manufacture of antibiotics and sulphur drugs in the early years under agreements signed in 1962, and also provided for the training of Indian personnel. However, IDPL points out that the levels reached by the Russians in drug technology are far from those reached by the West, and that in future it will have to depend more on itself or look beyond the Soviet Union for the latest know-how.

For its synthetic Erythromycin and D-oxycycline, IDPL went to the West. However, the Indian drug manufacturers resent the fact that Western companies keep technology transfer at limited levels and so keep them "eternally dependent."

As IDPL began producing different drugs and formulations, price levels buoyed by the multinationals started dropping dramatically. The price of tetracycline capsules, for instance, was cut by two thirds despite a 23 per cent increase in the material. "So you see how much profit the multinationals were making," said Dr. Behl. "This is a poor country and

Pearl Marshall



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INCENTIVE

## Oil imports becoming an impossible burden

INDIA's foreign exchange reserves, rising steadily for the past four years mainly because of remittances from Indians working abroad, have absorbed the impact of the heavy oil import bill. This has led to a deceptively complacent situation that has hidden the real nature of the near-impossible burden of oil imports.

Largely because oil imports, which were worth about Rs 25bn in 1979 and could go as high as Rs 45bn this year if OPEC prices continue to soar, the reserves are finally dipping. By the end of the year the oil imports could make such a dent in the reserves that the complacency that their size has given rise to could be shaken off quickly.

Oil imports in 1979-80 are expected to account for a massive 45 per cent of total export earnings and so easily constitute the single largest item in the import bill. If the trade deficit reaches the expected Rs 20bn in the current financial year, it will be due mainly to oil imports (and of course other commodity imports taken with the slow growth in exports this year). This is despite the fact that for India's size and industrial position, consumption is surprisingly low at roughly 30m tonnes a year, which puts the sub-continent in the lower league of oil purchasers.

Of this, roughly a third is actually produced within the country in on-shore fields in the north-east and in Gujarat as well as the recently-developed on-shore finds in the western continental shelf. Efforts are being made to increase internal production but these require heavy investments and have been set back by local political troubles in Assam, where production came to a near standstill recently because of picketing by local people over the issue of registration of "foreigners" in the electoral rolls.

This will undoubtedly blow over and, it is hoped, oil production will return to normal. But it serves to remind planners of the continued dependence on imports, a dependence that is so heavy that the turmoil in Iran and the fall in production internally has left the country with an alarming shortage of diesel and kerosene fuel that is harming both industrial and agricultural production apart from aggravating transport difficulties.

Therefore, willy nilly, India must continue to look outside for its oil needs. The constant efforts of officials in the Ministry of Petroleum are to ensure that contracts are tied up in

advance for the year so that the agreements reached at Government-to-Government level enable purchase of crude at official OPEC rates rather than at the high spot prices that an emergency would require (as it did for substantial amounts last year during the Iran shutdown).

Estimates this year are that about 20m tonnes of crude will need to be imported plus another 2m tonnes of refined products, such as diesel. If the production of processed products in the eastern refineries continues to decline, imports may have to be raised and this is a constant worry. Yet if the economy is to be gingered up, imports of crude and petroleum products are unavoidable and so must continue.

**Negotiations**

Mr. P. C. Sethi, Petroleum Minister, says that so far agreements for the supply of 15.5m tonnes have been firm and up and negotiations are in progress to firm up the remaining quantity needed. Suppliers include the traditional sources such as Iran, Abu Dhabi, Iraq and Russia, but feelers are being made to countries like Nigeria, Indonesia and even Mexico while Saudi Arabia is expected to make its normal contribution of 1.1m tonnes.

Even Libya, while last year suspended supplies because of differences over interpretation of the agreement with India for exchange of nuclear know-how, is expected to resume shipments.

But the Iranian crisis, which at one time threatened to result in the closure of a number of Indian refineries, has caused so much worry that the Indian Government will not feel really safe unless more than the required quantity is tied up. Hence, the continued efforts to cultivate the Arabs politically.

So far, the biggest slice has come from Iraq—which provided 6m tonnes last year and has promised the same amount this year, filling the gap caused by Iran—and this remains the most reliable source since political relations between Baghdad and New Delhi have improved swiftly.

But there is evidently a feeling of uncertainty about other sources. Saudi Arabia is a limited supplier and could prove erratic because of the situation arising out of the Afghanistan crisis and the pressure on India to accommodate Pakistan.

Iran, which should be the main supplier, is equally uncertain.

tant as a source. Hence the frantic trips made by Indian Ministers and officials to Mexico, Venezuela, and even China for new sources of supply. The situation will have to be watched from year to year (possibly month to month) for a long time.

Conscious of the need to minimise dependence on imports, the Government has decided to intensify efforts to increase production from India's own fields. Exploration and drilling for oil is now taking a major share of public-sector investment. A nationwide seismic survey has been made with the help of Russian experts. Provisional figures of crude reserves are 310.57m tonnes, and of natural gas 238.74m cu. metres.

There was a debate in progress over whether the reserves should be preserved until OPEC prices become impossible for the country to pay. The debate ended abruptly when OPEC prices rapidly reached this level last year. The decision to conserve the reserves has been quickly abandoned. Planners are now agreed on the need to tap whatever oil is possible, especially as India's already critical energy situation has been exacerbated by electricity generation problems owing to constraints on coal production.

The exploration is being done by the Government-owned Oil and Natural Gas Commission (ONGC) which is operating in the offshore regions of the western continental shelf, where important fields like Bombay High and Bassein have been found—and onshore in Gujarat. Oil India, owned jointly by the Government and Burmese Oil, operates in North-East India, although it recently won an offshore concession in the Mahanadi Basin in the Bay of Bengal where operations have begun.

Total production of offshore and onshore fields last year was about 11m tonnes, of which Bombay High accounted for about 4m tonnes. This is India's most dramatic find, which was developed within three years of oil being struck in 1975. Since the decision to slow down production from this expensive source has been reversed, heavy investment is in progress to ensure the maximum possible output from Bombay High and the structures in its vicinity. The current throughput of about 100,000 barrels a day is to be raised to a high 140,000 barrels after the next monsoon.

Hopes must therefore be pinned on finding new fields quickly and exploiting them as rapidly and successfully as Bombay High. Unfortunately, India has had mixed luck with oil discoveries. Gujarat and Assam are throwing up new oil-yielding wells as soon as others become dry but exploration in other states has not yielded results so far.

Last November, a new major find, also in the western continental shelf, at Ratnagiri, was announced. This is potentially as big as Bombay High and the first exploratory well is yielding about 7,000 barrels a day. More wells are to be drilled to determine the dimensions of Ratnagiri but, no matter how promising this proves to be, exploration successes have to increase if oil is to be less burdensome for India.

K. K. Sharma



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# Setbacks in fertiliser output

INDIA IS looking for opportunities to participate in fertiliser plants in the Gulf States and overtures have been going on for some time now with three or four countries. Any deal would include "buy-back" arrangements so that India could help satisfy its large and continuing requirements for fertiliser imports.

For industry sources feel that nitrogenous fertiliser shortages of more than 1m tonnes annually will continue well through the 1980s. They point to the higher prices of imports and escalating shipping freight charges.

India's demand for nitrogenous fertiliser this fiscal year has been about 3.7m tonnes, while production has barely reached 2.4m tonnes, despite an installed capacity that has rapidly increased from 3.255m tonnes six months ago to 4.5m by the end of this month. The difference between consumption and production means in effect a 35 per cent dependency on imports.

In five years' time (1984-85) the total annual nitrogenous fertiliser capacity will amount to about 6.5m tonnes but if plant operation continues to be dogged by the present overwhelming constraints, production will amount to only 4.5m. As demand will also be around 6.5m tonnes at that time, India will face an import requirement of about 30 per cent, or 2m tonnes.

## Optimistic

But this assumes that the nitrogenous plants will still only be running around 65 per cent of capacity, the highest utilisation rate reached so far. If optimistic forecasts of an 80 per cent capacity utilisation by that date by the Ministry of Chemicals and Fertilisers are to be accepted, then imports would need to supply only 20 per cent of consumption (1.3m tonnes).

The constraints this year on production have been enormous. As Dr. S. S. Baijal, chairman of the Fertiliser Association of India (FAI), put it, there has been a "large scale infrastructural failure" including shortages of power, coal and transport. The result has been a setback after four successive years of large increase in production and consumption.

The country's worst drought

in 60 years not only reduced the amount of crop acreage planted, and therefore affected fertiliser usage, but also dramatically lowered reservoir levels and caused problems in hydroelectric generation.

In addition, labour unrest in India's north-eastern oil and gas-producing region led to fuel scarcities. Coal production was also way below expectations and thermal plant operated at only 46 per cent of capacity instead of the planned 55 per cent.

Because of these factors, various states imposed a variety of power cuts on industry ranging up to 100 per cent.

The four new fuel oil-based plants commissioned this fiscal year, Panipat, Nangal, Sindri and Bhatinda, have been hit by severe shortages of fuel oil.

Steep power cuts imposed by the Uttar Pradesh government have all but shut down the public sector Fertilisers Corporation of India's Gorakhpur plant (naphtha-based) and Indian Explosives' Kanpur facility (also naphtha-based).

Both of the country's coal-based plants—Ramagundam in Andhra Pradesh and Talcher in Orissa—have suffered commissioning delays because of power shortages, but went into production officially on January 1 and 4 respectively. The Talcher plant (228,000 tonnes nitrogenous capacity) had to be shut down completely for a one month period after trials in September.

India currently has 32 nitrogenous fertiliser plants listed as being in commercial production by the end of this fiscal year, although several of them may not in fact be producing because of the constraints.

Another two are due on stream later this year—Hindustan Fertiliser Corporation's Haldia plant based on fuel oil, and Rashtriya Chemicals and Fertilisers' Trombay plant in Maharashtra based on natural gas—and June, next year, should see operation of Gujarat State Fertilisers' Broach plant based on fuel oil.

Future plants are being planned around gas from Bombay High and South Bassin on the west coast, and decisions on further coal plants will be held in abeyance until Ramagundam and Talcher have proved themselves.

There is a coal project at

Korba in Madhya Pradesh, for instance, that is now in cold storage.

Much depends on economics.

The coal plants are more expensive to build, but the feedstock is cheaper.

"If they run as well as they will in gas-based plants, then they will be economic," says a Petroleum Ministry official.

Of the gas-based projects, four 1,350 tonnes per day ammonia plants based on Bombay High gas have been cleared by the Indian Government's investment board and the Cabinet. Total costs will run to well over £150m with a foreign exchange component of at least \$560m. The World Bank, the UK and Japan are helping with financing.

Plants for two other smaller units in the States of Assam (Based on gas) and Uttar Pradesh (Based on naphtha) are also moving forward.

Two of the giant plants will be set up at Thal Vaishet in Maharashtra by Rashtriya Chemicals and Fertilisers, and the other two at Hazira in Gujarat by Indian Farmers' Fertilisers Co-operative (IFFCO).

The design will be by C. F. Braun of Alhambra, California. However, the Thal Vaishet project is now undergoing considerable delay while the Petroleum Ministry renegotiates the consultancy fee and cost of technology. "It could take another six months," says one Ministry source.

## Tenders

Tenders of four or five international companies for technology and consultancy work for Thal Vaishet's three 1,500 tonnes per day streams of the urea plant are also being reviewed.

The original bidders included Chiyoda of Japan, Foster Wheeler, Humphreys and Glasgow, and Kellogg of the UK (also naphtha-based).

and UHDE of West Germany. But where the Hazira complex is concerned, "we are now making a flying start," says Mr. Paul Pothen, IFFCO's managing director, "and will start manufacturing fertiliser by 1983."

The design will be by C. F. Braun of Alhambra, California. However, the Thal Vaishet project is now undergoing considerable delay while the Petroleum

Ministry renegotiates the consultancy fee and cost of technology. "It could take another six months," says one Ministry source.

The Government also proposes to set up six more 1,350 tonnes per day fertiliser plants in the next 10 years on the west coast utilising natural gas from Bombay High and South Bassin.

Recommendations by a Petroleum Ministry working group set up to evolve a distribution pattern for the Bombay High gas are currently being examined by the Public Investment Board in New Delhi.

Apart from benefiting the Maharashtra and Gujarat plants, the gas will also be carried through a Rs 7,500m pipeline

system to the states of Madhya Pradesh, Rajasthan and Uttar Pradesh.

India plans to power all its future fertiliser plants, including the four gas-based plants already approved, with captive coal-based units. The coal boilers will be designed to operate on natural gas in emergencies.

Where phosphatic fertilisers are concerned, production will be around 0.75m tonnes this fiscal year (1979-80) compared with the expected 0.8m tonnes.

This means that production has stayed roughly the same as 1978-79. Yet phosphatic fertiliser production increased 15.7 per cent in 1978-79 over the previous year, due mainly to better performance of some of the existing units (some utilisation was 71 per cent) and also added production from Trombay IV.

Pearl Marshall



Nitrogenous fertiliser shortages are expected to continue in the 1980s. Urea plant at Ahmedabad, Gujarat

# Scope in petrochemicals projects

JUST WHEN India will launch the three major petrochemicals projects envisaged in its now defunct sixth development plan is uncertain.

"They require a lot of investment [Rs 2.5bn] and then you have to promote the market," says a Petroleum Ministry official. "Certainly there is no rush—not like on the fertiliser industry front, for instance. At the moment we are much more concerned about kerosene and diesel supplies."

Former National Planning Commission member Raj Krishna adds: "Since Charan Singh's Prime Ministership there has been no decision-making and this continues. The Planning Commission has been dismissed and the sixth plan scrapped. There has been a general economic policy holiday—no plan, no budget, no industrial policy, just noises."

The general view is that demand projections in the petrochemicals sector have shifted into the future following a dearth of capital investment and major setbacks in production in most industrial sectors, particularly coal, steel, cement

and power. Oil price increases and their effect in naphtha prices (a 145 per cent spurt in the ex-factory price of naphtha last August, for instance) have also increased downstream product prices and dampened demand.

The most exciting of the three planned projects is the 1.5bn or more complex involving a 500,000 tonnes a year ethylene plant based on Bombay High and South Bassin gas, or its alternative, two smaller units (300,000 tonnes and 225,000 tonnes per year).

Two States are competing for this gas and both State companies—Maharashtra State Petrochemicals Corporation of Bombay and Gujarat State Petrochemicals Corporation of Ahmedabad—have contracted Engineers India of New Delhi to prepare viability studies identifying product patterns and site locations.

Downstream products are likely to be 200,000 tonnes LDPE, 80,000-100,000 HDPE, 200,000 PVC, 60,000 PS, and 30,000-100,000 ethylene oxide.

The other two projects in the original sixth plan, which was

to have run from 1978-1983, call for recovery of propylene from off-gas at four public sector refineries, which would allow a plant capacity of around 40,000 to 50,000 tonnes as well as a 2-ethyl hexanol capacity of 40,000-50,000 tonnes and the processing of 6m tonnes of Bombay High crude at two refineries to produce around 300,000 tonnes of benzene and 200,000 tonnes of xylenes.

Participation

Certainly, when the projects are ready to be funded, there will be plenty of scope for foreign process licensors and engineering contractors.

India's philosophy on foreign participation in its petrochemicals industry became clear during construction of its one and only major public sector petrochemical complex in operation at the moment, the \$500m Vadodara facility in the north-western State of Gujarat. It was formally inaugurated last March.

Indian companies worked with foreign equipment manu-

facturers and various Government and private research organisations. International process licensors provided the minimum basic package and gave support assistance for detailed engineering.

The licence for DMT's DMT process, for instance, was obtained from Dynamit Nobel of West Germany through Krupp, while the basic engineering was carried out by Krupp.

But the detailed engineering, procurement and construction supervision was undertaken by an Indian public sector enterprise. Engineers India and another Indian concern, Bharat Heavy Plates and Vessels designed and fabricated some of the equipment such as distillation columns, heat exchangers and pressure vessels.

Dr. S. Varadarajan, chairman and managing director of the operators, Indian Petrochemicals Corporation, describes Vadodara's inauguration as the "coming of age" of organic chemical technology in India. The construction provided a fillip to the country's entire engineering and fabrication industry. Some 60 per cent of

the total mechanical equipment was supplied indigenously, 95 per cent of the electrical equipment and 45 per cent of the instrumentation.

## Naphtha cracker

The naphtha cracker, licensed from Lummus UK, has a capacity of 130,000 tonnes a year ethylene, 38,000 tonnes polymer-grade propylene and 33,240 tonnes of chemical grade propylene. Licensor for the 63,900 tonnes per year pyrolysis gasoline hydrogenation unit was the Institut Francais de Petrole. In association with the Indian Institute of Petroleum, while Universal Oil Products of the U.S. was licensor for the 23,600 tonnes benzene extraction unit and the 22,000 tonnes butadiene extraction unit.

Apart from Vadodara, the Government has two more public sector complexes under way, one under construction and one at the letter of intent stage. The Bongaigaon refinery and petrochemicals complex in Assam in north-eastern India has a 45,000 tonnes capacity in DMT plant (already let out to

Krupp Koppers), a refinery (already under construction) and a 30,000 tonnes a year polyester staple fibre plant.

As for the second project, the Haldia petrochemical complex in West Bengal, a Petroleum Ministry spokesman said that there was talk now of independent financing, with collaboration from foreign companies.

"This is because the State Government wants it as its own project, and does not want central government involvement," he explained.

West Bengal Industrial Development Corporation has appointed C. V. Braun, working with Industrial Consulting Bureau of New Delhi, to evaluate bids for the various units that have been received from companies in West Germany, the UK, France, Italy and the U.S. Products will include 62,530 tonnes a year ethylene, 45,000 tonnes pvc, 30,000 tonnes high density polyethylene, 3,000 tonnes ethylene oxide, 12,000 tonnes ethylene glycol and 25,000 tonnes ethyl hexanol.

Pearl Marshall

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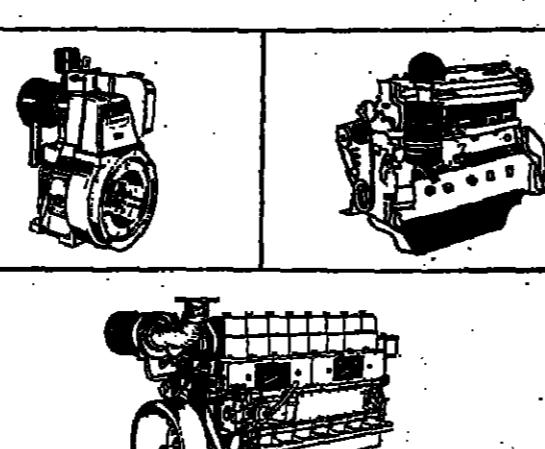
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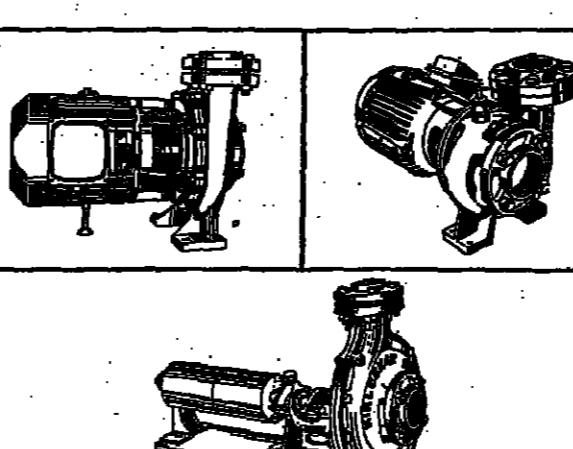
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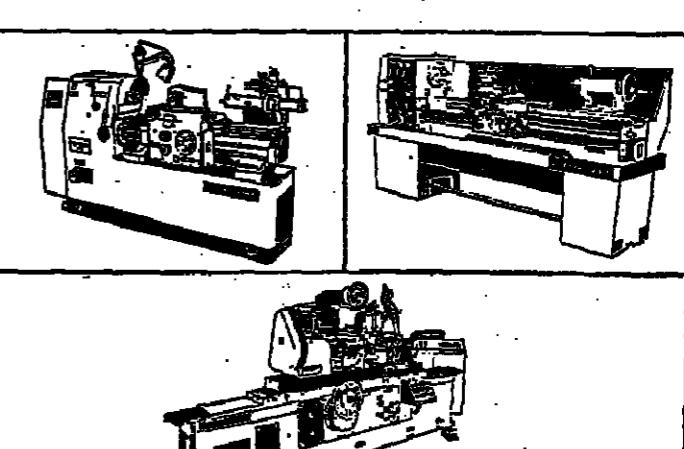
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## THE GOVERNMENT'S MERSEYSIDE REGENERATION PLAN

BY ANTHONY MORETON

## A quango walking on troubled waters

A RIDE down Liverpool's south docks road must be one of the most depressing experiences in Britain. The buildings stand gaunt, empty and derelict. It's like New York's lower east side without the people. From Pier Head, within a stone's throw of the centre of the city, to Toxteth the monotonous gloom is unrelied.

North of Pier Head, up into Bootle, things are better. The buildings still look as though little has been spent on them since Victorian times but at least there are ships moored, lorries loading and unloading and other signs of activity. And at Seaforth the busy container terminal shows what can happen.

This whole waterfront is now the subject of an enormous row which has broken out involving Mr. Michael Heseltine, the Secretary for the Environment, Merseyside County Council, Liverpool District Council and several other councils.

It concerns who should have responsibility for undertaking the massive development programme that will be necessary to inject life into this once prosperous area.

Just as the county council began to get to grips with the run-down area—probably one of the worst examples of urban dereliction in Britain—Mr. Heseltine has stepped in and set up a superpower, an urban development corporation (a sort of new town under a different banner), to mastermind its conversion. To add to the problems, Sir Keith Joseph's Industry Department has leaked the idea that part of the area at Speke is under consideration for designation as one of the country's enterprise zones, where businessmen will be free from such irksome constraints as the need to apply for planning controls or pay rates. How this squares with

Mr. Heseltine's ideas is not at all clear.

The proposal for an urban development corporation immediately led to a great row between the Conservative-controlled Merseyside County Council and the Minister. Harsh words were said about the Minister in the city. And Liverpool District Council, the Labour-controlled secondary authority, stirred the pot by making it plain it had little sympathy with the county and not much more with Whitehall.

But, suddenly, earlier this month, to everyone's surprise, Mr. Heseltine won over his most severe critic, Sir Kenneth Thompson, Tory leader of the county council. Sir Kenneth is introducing socialism by stealth. For the corporations will be quangos; and they will pour hundreds of millions of money—into run-down areas.

The businessmen are there also to try to interest private developers and private money into projects.

It is clear that Sir Kenneth is still not fully convinced that Merseyside needs an urban development corporation but he understands that Mr. Heseltine intends to introduce one. The best course, as he sees it, is to co-operate with the inevitable.

One of Sir Kenneth's major tasks will be to placate Liverpool District Council. The antipathy between county and district goes back to local government reorganisation in 1974. Before 1974 Liverpool was a big city; it had a lord mayor and was sovereign within its own borders. Now it is a district, no different from its neighbours, Sefton or St. Helens or the Wirral. The districts run education, housing, social services, libraries and parks but the county is responsible for the police, fire brigade, Liverpool airport, art galleries, the Mersey tunnels and, most important, industrial development.

Here the role of Sir Kenneth is all-important because of his implacable opposition to the establishment of an urban development corporation until the very last moment. He said some very nasty things about it. One of the more polite, as he finally admits, was that "an urban development corporation would be another quango and one to dissipate resources and cause delays."

So why did he change his mind? To answer this one has to understand his background.

In local politics Sir Kenneth, at the age of 70, is a very senior figure. For 14 years he represented Liverpool's Walton constituency at Westminster, for five of those years he was a junior minister, first as Assistant Postmaster-General, later Parliamentary Secretary at the Ministry of Education.

The need for an active politician is obvious. The work of each urban development corporation will cut very much across—and take powers from—the local authorities in the area. In London five boroughs and the Greater London Council are affected:—in Liverpool, three districts (Liverpool, Sefton and the Wirral) and the county.

It is not usual to find council leaders who have spent time at Westminster, still less usual to find an ex-minister in the council chamber. One thing that Sir Kenneth learned during his years in central government

## Letters to the Editor

## Productivity in steel

From Mr. P. Kille. Sir—I have just heard, yet again, Mr. Schreyer of British Steel Corporation declaring that the unions will receive at least a 20 per cent increase on wages if only they would accept his plan of local productivity agreements. The unions have not up to now accepted this, and in my opinion will not do so, and I think I can see why.

From my experience and observations of the steel industry at Corby and at other works, very little control of productivity can be achieved through human agency. The speed of throughput, from ore to the sidings through to outputs from rolling mills is determined by machines and mechanical means and by the technical and physical nature of molten iron and steel.

Increased productivity is achieved right at the beginning, by increased orders, not by the men. Getting orders is the job of BSC management, not that of the men.

The unions must look on productivity agreements as a con trick. If BSC does not get orders, it will not have a relatively fixed wage bill to pay, as such agreements will automatically reduce the wages cost, to the benefit of the company, but at the expense of men's living standards.

S. Kille. 8. Welford Grove, Corby, Northants.

## Civil Service pensions

From Mr. L. Bryant. Sir—Once again, Mr. Kendall is on the defensive regarding that section of the community forming an increasingly privileged group in respect of pension expectations.

He calculates that civil servants will themselves pay 57 per cent of the cost of civil service pensions for this year. Does he mean 57 per cent of pensions currently paid to a number significantly less than the civil servants of today, or does he mean 57 per cent of the actuarial cost of providing inflation-proofed pensions for those currently employed?

Mr. Kendall said that inflation-proofed pensions can be had for money. Could he please give the name and business address of an actuary who is prepared to quote a figure for an inflation-proofed pension to be funded, so that the full liability is met even if the employer concerned subsequently goes out of business?

The reason that employees in the private sector cannot count on inflation-proofed pensions is quite simple: their employers cannot print money. The State can only guarantee inflation-proofed pensions to civil servants and others because it can tax the rest of us in order to do so and is not obliged to fund its commitments.

If civil service pensions continue to be indexed they should be indexed in accordance with the general level of pension increases which the private sector can afford. By the same token, the percentage contributions should be likewise comparable. Unless this is done quickly, there will develop a deep division within the nation which is undesirable, and unnecessary. Three-quarters

of a million civil servants are entitled to fairness and justice; so are 25m other employees. There should be reasonable comparability between the two. Civil servants duly obtained comparability in respect of earnings, but they are pushing their luck just too hard in respect of pension guarantees.

W. Bryant. 23 Kingsfield Avenue, Ipswich.

## Index-linking arguments

From Mr. E. Brown.

Sir—To end once and for all the arguments over index-linked pensions for local and central government employees including Ministers and MPs, there is one logical solution. Government introduction of legislation to stop them completely before the next increases are due in 1980. In return, increase salaries in the public sector by the amount of the claimed average contribution of the private sector employees without future index-linked pensions. Additionally, make a once and for all payment to current employees and pensioners of the extra amount they claim they have contributed since the introduction of this financially incalculable perk. Equate working conditions between the private and public sectors, i.e. retirement age, holidays and the length of the working week.

The Government could then invite the private sector pension fund industry to calculate the cost of index-linked pensions up to 5 per cent, 10 per cent or 15 per cent inflation, based on similar schemes in the private sector. Local and central government employees, including MPs to be given a choice of making additional contributions to guarantee some indexing of their pensions but over 5 per cent the whole cost to be funded by themselves.

This will satisfy the vast majority of the wealth creators of our nation who rightly or wrongly consider there is an orchestrated fiddle of pension and other statistics by senior civil servants and their union officials to justify their own ends. It will also give most taxpayers a feeling that justice has been done and that by reducing inflation at a stroke it will help the vast majority of private sector pensioners who have seen their incomes diminish at an ever increasing rate due to the inefficiencies of successive Governments.

When inflation has been reduced to a manageable level of around 2 per cent to 3 per cent, the Government of the day can then look at pensions on a national basis.

E. C. Brown. 17, Hawkswood Drive, Merton.

Nr. Ilford, W. Yorks.

## Imports of textiles

From the National Officer.

Association of Scientific, Technical and Managerial Staffs.

Sir—The warnings (March 8) by Mr. Alan Clough, president of the Textile Institute, appear to show a growing sense of frustration by textile and clothing manufacturers, who are, to date, experiencing little interest and very little help with their problems from the European Commission. I believe a similar attitude is beginning to show itself.

from our Government (managed fibre and carpet imports). If, as Mr. Clough suggests, textile manufacturers should consider producing abroad, one must ask is it not slightly hypocritical to shout from the rooftops "buy British," and then to move your manufacturing capacity to another country. What price to employment would this policy mean both for the United Kingdom and, indeed, Europe as a whole? We would surely find ourselves in a situation where the Government which is so fanatically committed to controlling the money supply, having to find more ready cash to pay for more unemployed.

Perhaps we should put John Bull first, and the Government produce a policy for proper import management and allow the textile industry to re-equip for the future.

Roger Beson. 16 East Road, Longsight, Manchester.

## Defence dilemma

From Mr. P. O'Brien.

Sir—The logical conclusion to Britain's defence dilemma (article by Ian Davidson, March 11) for the EEC to be taken one stage further and defence integrated with EEC finance. Ideally, the forces of each member country would be integrated into one force and foreign affairs be dealt with initially by the Council and later by a Cabinet drawn from the European Parliament.

If conscription were introduced on the French pattern and our youth served in mixed

units the integration of Europe would be achieved in a short time. The rationale and finance of defence would be more easily resolved. The effectiveness and economy of defence more likely.

P. O'Brien. 52, Harpeshurst Avenue, Virginia Water, Surrey.

## Military threat

From Major General R. Mans.

Sir—The weakness of Ian Davidson's logic in his article on our Defence Dilemma (March 11) was that he developed his argument from an almost entirely economic standpoint: omitting any mention at the outset of the military threat posed by the Soviet Union and its surrogates against the West.

(Maj. Gen.) R. S. N. Mans.

Kirke House, Surrey Road, Brockenhurst, Hampshire.

Hants.

Dereliction in docklands

From Mr. D. Bloomfield.

Sir—I must take issue with Mr. Staden of the Transport and General Workers' Union (March 12).

The problem in London's docklands area, is not release of land, but provision of modern roads. The South Woodford to Barking relief road will not commence until 1982 and the East London river crossing is not programmed. The Southern relief road is a matter of considerable argument, again no action.

In the light of these circumstances, the release of more land would be of no benefit and we can only have a vibrant inner city area if the means of communication are provided.

David W. Bloomfield, County and Suburban Properties, 23, Dorset Street, W1.

## Outsiders on the board

From Mr. J. Butcher.

Sir—Like a series of Grand Old Dukes of York (or, Plaza Toros?), one entrepreneurial big shot after another has burst upon the British business scene, marched his company to the top of the nearest hill, only to find that there's a precipice there.

On the way up the institutional investors rush to join the ranks of the noble "Duke's" army, enjoying the spoils on the way. Sometimes there is a takeover battle and, while the sound of shot and shell rends the air, the nimble men from EC2 have deserted to the other side. At other times when the going has got rough, the army of analysts have flogged their ammo to the nearest trooper and scurried off to join some other general.

In this game deserters don't get shot—but then neither do mutineers and it is a sad reflection on the men of the Life (Assurance) Guards and the Infantry Unit (Trust) etc that they have never simply refused to let their "Duke's" march another step until he has appointed a couple of able staff colonels to stop him charging into the Valley of Death.

Every company needs to have institutional investors who accept their responsibilities, one of which should be to take the lead in finding and appointing at least two non-executive directors (NEDs) to its boardroom. You command (Editorial, March 13) the U.S. practice whereby senior executives from non-competing companies take on this job. The trouble here is that it requires at least two days a month—and in critical times as many as two days a

week—to discharge the job adequately and the full time executive cannot do this. There must surely be many men with good experience, but more important lots of wisdom, who are willing to do work of this type for half a dozen or so non-competing companies, as their main activity.

But if the NEDs are doing a

good job, calling an egm should not be necessary. They will need to "have access to information on which to judge the performance of the company" (as you suggest) but must also satisfy themselves that the information is reliable and that they are getting the full picture. Not only must they be in contact with the senior management, especially on the financial side, but they will need to review matters with the auditors. Indeed one of their tasks may be to bring in new auditors if this is in the shareholders' interests.

John V. C. Butcher. 16 Marsham Street, SW1.

Faced by such a threat to our fundamental freedoms discussion of the relative merits of spending money on defence or welfare borders on the trivial.

Talk at this critical stage in international affairs of reducing armed forces smacks of the appeasement policy of the 1930s and we need no reminder of the disastrous end of that road. Regrettably, to achieve and remain at the required level of deterrence often demands economic sacrifices, but surely it is far, far better that we should be prepared to make such sacrifices rather than give the enemy any reason to suppose that we have grown so weak that overt aggression would be a worthwhile risk. All history shows that this is the sure path to war.

(Maj. Gen.) R. S. N. Mans.

Kirke House, Surrey Road, Brockenhurst, Hampshire.

Hants.

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David W. Bloomfield, County and Suburban Properties, 23, Dorset Street, W1.

## Looking at patents

From Dr. C. Oppenheim.

Sir—A. H. Hermann's excellent survey of the problems of British patent classification (March 12) includes two erroneous statements made by the Patent Office. It is not true that the original British patent classification was devised to assist examiners assess for novelty; it was designed for the public's use—it's use by examiners only occurred decades later. It is time the system returned to this original purpose.

It is nonsense to state that input time for computer coding is high and computerised retrieval systems are inflexible. All major information retrieval systems are now computerised and they work flexibly, efficiently and reasonably cheaply. That the Patent Office refuses to bring its system into the 20th century is bad enough, but to make lame excuses about "inflexibility" demonstrates how lacking in knowledge about current developments it is. A flexible and cheap computerised system would probably provide better retrieval than the Patent Office's present system, and at lower cost. What will it take to convince the Patent Office that it is time it had a rethink?

Dr. C. Oppenheim.

The City University.

16 Marsham Street, SW1.

London EC1.

GENERAL  
UK: Mr. James Callaghan, Opposition leader, opens constituency Labour Party headquarters at H. G. Wells Centre, Bromley.

Union of Post Office Workers' general delegate conference on reduced working week offer.

Mr. Tony Benn, Mr. Stuart Holland and Mr. Paul Foot are among speakers at Labour Party Congress meeting on the future of the Left, Central Hall, Westminster.

Eventually, a year ago Merseyside County Council negotiated a 150-year lease with the Mersey Docks company and the way was opened for development. Immediately, the council was approached by a number of developers, 20 knocking on the doors of county hall.

One set of docks—Albert, Canning and Salthouse—almost next to Pier Head, is already

under offer to Gerald Zisman Associates for a trade centre. And a consortium has proposed a massive development for the Queen's Dock which will include industry, housing, shopping, leisure and community interests. The most eye-catching aspect of its proposals is the proposal for 2m sq ft of office space contained in a single tower 1,335 ft high, one of the tallest buildings in Europe. The consortium believes such a development could generate between 30,000 and 40,000 jobs.

Any development that proposes jobs would obviously be looked at sympathetically in Liverpool. The city has an unemployment rate of over 12 per cent, twice the national average, and no sooner does its go-ahead development agency (an offshoot of Liverpool District Council) manage to attract more companies than a big closure is announced.

Last year 14 closures affecting more than 100 employees each time were announced, ranging from Dunlop's decision to close its tyre plant with the loss of 2,291 jobs, to the 100 lost by James A. White's building

(and in the Wirral).

GENERAL  
Overseas: Mr. Douglas Hurd, Foreign Minister, and Ministerial representatives from Australia, the U.S. and other countries, meet in Geneva to plan alternative Olympic Games.

EEC Finance Ministers meet in Brussels.

International Brewing, Bottling, and Allied Trades Exhibition, and the International Packaging Exhibition, open at the National Exhibition Centre.

## Noble & Lund profit setback

A further sharp fall in the second half after the mid-term decline left taxable profits of Noble and Lund well down at £67,688 for 1979, against £127,371 previously.

The net total dividend is cut from 6.425p to 4.42p, with a final dividend of 0.245p (0.6125p). The directors say this takes account of the possibility of further deterioration in the near future.

They add that profit margins of this engineer and machine tool maker have been eroded in the face of the road haulage, engineering and steel strikes. The present high level of interest rates in the UK and exchange rates are reducing the demand for high value machines.

Turnover for 1979 was little changed at £2.24m, against £2.22m. After a tax credit of £321 (£78,537 charge), the net balance emerged down from £93,834 to £68,610.

Earnings per 10p share are given as 1.19p, compared with 1.64p.

## Bass denies plan to buy Centre Hotels from Coral

BREWERY GROUP Bass said yesterday that it had shown interest in Coral Leisure's chain of Centre Hotels. However, Mr. James R. Lloyd, vice-chairman of Bass, stated that it had no specific plans at present to acquire the chain.

Bass became aware that the hotels might be for sale, and requested further information. Mr. Lloyd added: It has not yet received sufficient details to assess whether it would be interested in all or part of the chain.

"Expressing a general view, we will look at any offer or group," said Mr. Richard Beer, Bass Hotel managing director. But, although the group is interested in expanding its hotel side, any prospective Coral purchase is "only rumours so far."

Coral's Centre Hotels comprise 21 hotels and two inns in the UK, Britain's fourth largest hotel chain. It also has four hotels in Amsterdam.

Outside estimates suggest that the Centre chain might fetch some £45m.

Bass's own Crest Hotel chain consists of 54 UK hotels and a further 30 on the Continent.

**LAGANVALE**  
Laganvale has agreed to purchase the freehold properties

230a, 242-248 (even numbers) Kentish Town Road and 14-19 (consecutively) Wolsey Mews NW5.

The property is being acquired from Rubistar Investment Company for £251,500, with a book value £250,000. The consideration is to be satisfied by the issue of 898,214 new fully paid ordinary shares.

Mr. Jim Souness, the general manager of LAS, stated that by increasing the terminal bonus, the shareholders were given a more favourable benefit.

Mr. Souness also pointed out that the higher compound reveresary bonus rates reflected the investment performance of the company which had resulted in a higher average yield and increased realised capital profits.

The two companies announced their intention in December of forming the new group, to be called IMI Cornelius.

Agreements have now been finalised, and the group begins trading with a turnover of some £20m annually. It comprises all European subsidiaries of Cornelius, which is prominent in drink dispensing technology, together with IMI subsidiaries Redditch Controls, and IMI Paxman. IMI will also make a cash payment to Cornelius of £106,000.

The group plans to operate in all European countries, in both beer and soft drinks. It is owned 50-50 by the two companies. Its chairman and chief executive is Mr. Roy Amos, with Mr. Bob Spencer as deputy chairman. Both men come from the IMI group.

Tax for the period took £1,245 (£312) earnings per 20p share to £0.69p (£7.41p) and again there was no dividend. Last year there was an extraordinary debit of £20,134.

On the simple bonus series, which is now closed to new business, the bonus rate remains unchanged at 25 per cent of the basic benefit and attaching bonuses.

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## INTERNATIONAL CAPITAL MARKETS

## THE CARTER PACKAGE

BY DAVID LASCELLES

## CURRENT INTERNATIONAL BOND ISSUES

Borrowers	Amount m.	Maturity	Av. life years	Coupon %	Price	Lead manager	Offer yield %
U.S. DOLLARS							
ENEL	200	1987	7	5 1/2	100	Societe Generale	5.319%
Export Devol. Corp.	250	1985	5	14	100	Salomon Bros.	14.490
D-MARKS							
City of Oslo	80	1990	6 1/2	9 1/2	99 1/2	Deutsche Bank	8.789
FRENCH FRANCS							
ECSC	150	1986	6	14 1/2	99	Credit Lyonnais	14.511
SWISS FRANCS							
**Nippon Meat Packers	30	1985	—	6 1/2	100	Credit Suisse	6.375
**Prima Meat Packers	30	1985	—	6 1/2	100	UBS	6.500
**IBM World Trade Corp.	100	1986	—	6	100	SBC	6.000
TEB	80	1990	—	6	98 1/2	Soditic	6.206

\* Not yet priced. \*\* Final terms. \*\* Payment. † Floating rate note. • Minimum. § Convertible.  
† Registered with U.S. Securities and Exchange Commission. † Purchase Fund.  
Note: Yields are calculated on AIBD basis.

## INTERNATIONAL BONDS

BY FRANCIS GHILES

## Challenge to hard currencies

INITIAL reaction among bond houses in Europe to the effect of the latest set of anti-inflation measures announced by President Carter on Friday was cautious.

Bankers said that it was too early to forecast how dollar bonds would move but agreed that the hard currency sectors of the market were likely to be hard hit.

Where dollars were concerned, bankers said that the attraction for investors of short-term dollar deposits could prove irresistible. Not only is the return very high, especially if U.S. interest rates climb further as is widely forecast, but the currency itself stands to gain a lot from these measures. Whether such strength is translated into any movement on the dollar bond front is nevertheless open to question.

Logically short-dated straight dollar bonds prices should fall, but such a forecast ignores two points. First, few such bonds are held by U.S. institutions, the ones which might be squeezed for cash and have to sell. Second, it is extremely difficult to find such paper, even at the current depressed prices.

Thus, shorter dated bond prices might well be marked down by dealers to bring the yield offered on such paper more in line with U.S. money market rates but it does not follow that there will be much real trading of such bonds.

What happens at the longer end is more difficult to predict. Most bond managers and dealers said that institutional clients would require at least until the middle of the week to assess the likely consequences of President Carter's latest set of anti-inflationary measures.

During the next few days what happens in the money

markets and to certificates of deposit (CDs) may well provide a more reliable guide as to the thinking of investors and banks. The heaviest impact of the Carter package is expected to fall on the harder currency sectors of the Eurobond market. That view is shared by bankers in Zurich, Frankfurt and London.

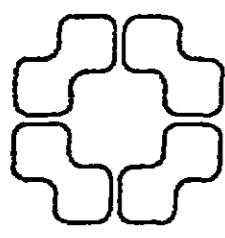
In the Swiss franc foreign bond market, where prices fell by at least two points last week, bankers said that the crucial factor is how far Eurodollar deposit rates rise as a result of the Carter package. This sector has been labouring for several weeks under the widening interest rate differential between dollars and Swiss francs and that differential looks set to widen further.

In the Deutsche Mark foreign bond sector there was more stability last week than for some time and towards the end of the week some dealers pointed to buying from abroad which affected a good quality bonds whose yield had come close to 10 per cent.

German bankers remain nevertheless deeply pessimistic about the future and some echoed the conclusion of the weekly telex of Ross and Partners (Securities): "The old automatic rule of 'never a borrower but a lender of Deutsche Marks' must now be reversed to read 'ever a borrower but never a lender of Deutsche Marks'."

The Eurobond markets spent last week anxiously waiting for the Carter measures. A mild rally in straight dollar bonds at the beginning of the week quickly developed into a professional short covering scramble. As Kidder Peabody's weekly telex to investors put it: "The bond markets have not been published this week."

This announcement appears as a matter of record only.



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Nederlandsche Middenstandsbank NV  
F. van Lanschot Bankiers NV  
Chase Manhattan Limited  
Kredietbank International Group

March 17, 1980

## U.S. BONDS

## Trading thin and volatile

By Our New York Staff

THE MARKET spent most of the week preparing itself for President Carter's economic package. Trading was thin and rather volatile, but it ended on an upbeat, which suggests that there was some hope that the measures would work. However, the details of the package were spaced out, starting only half an hour before trading closed on Friday afternoon, and with the bulk of the news of changes in credit policy following a couple of hours later. So the market has not yet had a chance to react fully.

Interest rates generally declined during the week. Short rates shed about half a point, with similar falls coming at the intermediate and long end. Although Fed funds were off slightly, that market was particularly hard to gauge because the Fed supplied considerable amounts to meet seasonal needs. The desired trading range seemed to be 16 per cent to 17 per cent. Treasury bills set new record yields at last Monday's auction, but strengthened later in the week.

Apart from a string of leaks about the contents of Mr. Carter's package, the market had to contend with a number of developments. The prime rate climbed 1/4 per cent to 18 1/2 per cent, much as expected, and production figures pointed to a fair pace of underlying economic activity.

The money supply figures were mixed (M1A was down \$50m from the initial \$200m). However M1B's annual growth rate of 8.6 per cent is still above the Fed's 4.6 per cent target. The Fed's report also showed that bank borrowing from the discount window soared by nearly \$1bn to a daily average of \$3.3bn in the week ending March 12. This would partially explain the 3 per cent selective discount rate increase contained in Mr. Carter's weekend pack-

age. As interest rates in the money market have soared in the past year, the rates of return which the funds have been able to offer investors, with as little as \$500 in some cases, has increased dramatically to around 13 and 14 per cent and seem destined

## WALL STREET REACTION

## Higher short-term rates in prospect

WALL STREET economic experts who were willing to comment over the weekend on President Carter's package said that the measures would push up short-term interest rates quite sharply. A 20 per cent prime rate (compared with last week's 18 1/2 per cent) is considered a virtual certainty before long. The more stringent reserve requirements will force banks to scramble for funds, and this is bound to drive up rates on key sources like certificates of deposit.

On the other hand, the measures could produce more stability in the deeply depressed bond market — quite how much depends on how Wall Street reacts in the next few days.

Most experts were, however, still treating the package warily over the weekend, reluctant to try to call the market when it opens today. Dr. Henry Kaufman, the economist at Salomon Brothers, who ranks among the most influential figures in the credit markets, said that the measures clearly put the burden on the monetary authorities and brought the Fed in interest rates closer. But his considered verdict will

not come until this afternoon, when he puts out a special issue of his weekly newsletter, Comments on Credit.

Mr. Walter Hoadley, the senior economist at Bank of America, described the package as "basically hopeful" and said that Mr. Carter had delivered a realistic economic message to the country. But he stressed that there are still so many uncertainties around that the Administration and the Fed will have to give the package a strong "follow through" if it is to work.

Mr. Hoadley welcomed the new credit measures but commented that the real area where credit controls should be applied was to the Government's budget, and he was disappointed that there had not been any real effort to cut back government spending.

This view was shared by Mr.

Erich Heinemann, money market economist at Morgan Stanley, who complained that Mr. Carter had failed, probably for political reasons, to tackle

the problem of "transient payments" like social security and pensions, which account for much of the increase in government spending. He also deplored the oil import fee because it raised government revenues and spared it the need to cut back.

"They have not tightened their own belt."

Mr. Heinemann predicted that measures like the oil fee would force the Fed to accommodate the credit markets still further as prices continue to rise. He also believed that this would not be Mr. Carter's last anti-inflation package.

Another would be necessary in the summer, he said, probably complete with wage and price controls.

Mr. Jeffrey Nichols, economist at Argus, the Wall Street research firm, saw the package producing a sharp upturn or "spike" in short-term interest rates. But he commented that the lasting effect would depend on how much credibility Wall Street attached to the determination of the Administration and the Fed to fight inflation.

The past record was not very good, he said.

There were also doubts as to whether Congress would accept the proposed budget cuts.

BY STEWART FLEMING

## Surging assets worry the Fed

FEARS ABOUT the remarkable growth of a relatively new form of financial intermediary, the Money Market Mutual Fund, has led the Federal Reserve Board to introduce measures aimed at curbing this growth as part of its credit restraint programme.

Money Market Mutual Funds are a creature of the 1970s, born out of high interest rates and inflation and the inability of small investors with less than \$100,000 to get a lump sum of \$10,000 to get the benefit of these high fixed interest returns in saving deposits at their commercial banks, and savings institutions.

Government regulations limit to 5% per cent the maximum rate of interest that can be paid on regular pass book savings.

Investors have been unable to resist the attractions of these high returns and money has been flooding into the funds.

By the end of February, their assets had grown to \$60bn, and passed the total assets of the old established Mutual Funds which

have less attractive rates.

More important, much of the money appears to have been draining out of bank accounts at smaller banks and savings institutions, increasing their financing problems and raising fears that the flow of small savings from them will become a flood.

Thus, the Federal Reserve

has acted to impose a 15 per cent non-interest bearing special deposit on increases in the assets of Money Market Mutual Funds after March 14. This will tend to reduce the rate of return which investors will obtain, making the Money Market Funds less attractive. They retain competitive advantages such as the ability of the investor to withdraw his money quickly and what will still be high rates of return, so it remains to be seen whether the Fed's move will stem their growth sufficiently to ease the pressures which are being created on other financial institutions.

## Text of Federal Reserve statement

THE FOLLOWING is the text of the Federal Reserve Board's statement issued on Friday night.

The Federal Reserve Board today announced a series of monetary and credit actions to combat the inflationary pressures. The actions are:

1-A voluntary Special Credit Restraint Program will apply to all domestic commercial banks, holding companies, business credit extended by finance companies, credit extended to U.S. residents by U.S. branches and foreign offices of foreign banks. The parents and affiliates of those foreign banks are urged to co-operate in similarly restraining credit in their foreign branches.

2-A program of restraint on certain types of consumer credit, including credit cards, check credit, overdraft plans, unsecured personal loans and secured credit where the proceeds are used to finance the collateral.

3-A program of restraint on certain types of credit are encouraged particularly:

• To restrain unsecured lending to consumers, including credit cards and other revolving credits. Credit for automobiles, home mortgages and home improvement loans and mortgage credit are not covered by the program.

• To restrain lending to individuals to 10 per cent in the marginal reserve requirement on the managed paper market is normally covered by bank credit lines. Banks are expected to avoid increases in commitments for new lending to consumers, home improvement loans and mortgage credit.

• Numerical guidelines for particular types of credit are planned but banks are asked to restrain lending to consumers, including credit cards and other revolving credits.

• To restrain lending to individuals to 15 per cent for all lenders on increases in covered types of credit.

4-Restrain on the amount of credit raised by large non-member banks by establishing a special deposit requirement of 15 per cent for all lenders on increases in covered types of credit.

5-Restrain on the rapid expansion of money market mutual funds by establishing a special deposit requirement of 15 per cent on increases in their total assets above the level of March 14.

6-A surcharge on discount borrowing by large banks to discourage frequent use of the discount window and to speed bank adjustments in response to restraint on bank reserves.

7-A surcharge on borrowings by banks with deposits of \$500m or more for more than one week in a row or more than four weeks in any calendar quarter. The discount rate remains at 13 per cent.

In making the announcement, the Board said:

"President Carter has announced a broad program of fiscal, energy, credit and other measures designed to moderate and reduce inflationary forces in the economy that can also lay the ground work for a return to stable economic growth."

"Consistent with that objective and with the continuing intent of the Federal Reserve to restrain money and credit during 1980, the Federal Reserve has at the same time taken certain further actions to reinforce the effectiveness of the measures announced. Occupying 10 per cent of the marginal reserve requirements in the managed paper market, the Board has increased the discount rate on the managed paper market to 18 1/2 per cent, effective March 14. This will be effective in the first quarter of 1980."

"The Board has also provided for a special deposit requirement of 15 per cent on increases in the assets of Money Market Mutual Funds, effective March 14. This will be effective in the first quarter of 1980."

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## THE CARTER PACKAGE

## Carter's cost-cutting plans: the main points

PRESIDENT CARTER proposed a five-point plan to end what he called the U.S.'s "national delusion" about inflation. "We cannot accept high rates of inflation as a permanent fact of American life," he said.

He claimed strong bipartisan backing for the programme in Congress and said it would be sufficient to cut inflation, as measured by the consumer price index, by single digits next year. The rate was 13 per cent last year and 18 per cent on an annual basis last month.

The Administration predicts a very slight recession later this year—with a quarter point drop in gross national product over the whole year—and a slower-than—previously—expected recovery in 1981.

The five main sets of proposals are:

1—The Budget for the fiscal year starting in October will be cut by \$13bn, creating the first balanced budget for 12 years. Most of the new spending programmes, except higher defence allocations, will be cut and there will be a freeze on federal government employment.

2—Credit controls: The President has reinforced the Federal Reserve's traditional powers to control money and credit expansion by empowering the Fed to establish limits of growth on credit cards and other forms of unsecured lending. Secured loans on cars, houses and other durable goods are exempt. The Government's own loan and loan guarantee programme is to be cut by \$400 next year. One aim is to revive the rate of saving.

3—Wage and price controls: Mandatory measures rejected, but tougher backing for the recently agreed 7½ per cent annual wage increase standard for this year. Staff on the Council on Wage and Price Stability will be trebled to 240 and monitoring stepped up.

4—Oil tax: A \$4.62 per barrel fee will be imposed on all imported oil and the cost passed on to the consumer entirely in petrol prices which will go up by 10 cents a gallon (about 8 per cent) as a result.

5—Long-term structural changes: Mr. Carter's Presidential Commission will produce an "agenda for the eighties" aiming to plan tax reductions and other means of stimulating flagging industrial productivity.

## Shock treatment for inflation psychology

Stewart Fleming analyses the reasons behind the imposition of controls on consumer credit

Mr. Paul Volcker  
Fed chairman

SINCE the end of 1974, total credit in the U.S. economy has expanded from \$2,000bn to nearly \$3,700bn. Debt on family homes has more than doubled to \$800bn. Slowly it is being recognised that this expansion of borrowing has produced an "inflation psychology" — buy now, for tomorrow it will cost you more.

It is this growing awareness, coupled with the increasing uncertainty about the ability of a gradually tightening Fed monetary policy to choke off credit growth which helps to account for the new credit control proposals in the anti-inflation package.

Mr. Volcker insists that "the core of the Federal reserve programme remains traditional (monetary) restraint action," but on to this he has grafted a special credit restraint programme which includes:

• Qualitative guidelines to commercial banks as to which forms of lending the Fed sees to be most consistent with its monetary aims.

• A request that growth in loans at individual banks should not generally exceed the upper part of the Fed's 6-8 per cent target for the growth of total bank credit, coupled with a warning that the performance of banks with below average capital or liquidity ratios in meeting this target will be "especially closely reviewed."

• An increase of 8 per cent to 10 per cent in the marginal reserve requirement on the

managed liabilities of large banks coupled with a reduction in the base upon which the requirement is calculated.

Understandably, given the consumer's role in continuing to stimulate the economy much of the focus of the new measures is on consumer credit. Evidence is growing however that the consumer's voracious appetite for new loans is easing.

Emerging weakness in specific sectors of the economy, notably housing and cars, has dictated that the Fed excludes lending related to these sectors from its restraints.

There are several reasons for the apparent weakening. Some bankers suggest that the consumer is beginning to discipline his appetite for credit in the face of debt burden repayments which have risen to around 23 per cent of disposable income.

Others point out that in certain states the banks are beginning to impose discipline. Some are beginning to withdraw credit cards because of rising losses from bad debts. In New York for example, usury ceilings which limit the amount of interest customers can be charged have turned the business into the red.

The credit card industry in the U.S. probably suffered a loss in the fourth quarter of 1979, according to the president of Visa, one of the two main bank credit card organisations.

This is why the Fed has decided to require lenders of consumer credit cards to certain forms of consumer

credit, including credit cards, and loans for home improvement, unsecured personal loans and secured credit, where the proceeds are not used to finance the collateral (second mortgages for example) should have to put aside special deposits of 15 per cent. in non-interest-earning reserve accounts with the Fed.

This will raise the cost of funds to the lenders covered which include retailers, petrol companies and travel and entertainment card companies. But significantly, large sectors of the consumer credit market are excluded, including car loans, insurance policy loans, with the tax-paying season

approaching and the bond markets closing to a wide range of companies, this growth will continue.

The Federal Reserve's basic monetary policy, its monetary growth and credit growth targets, are aimed at constraining this credit expansion. But there have been so many failures of monetary policy as inflation has accelerated, even since last October, that it is scarcely surprising that the Central Bank is proposing a "special credit restraint programme" as a second line of attack.

## Dual aim behind fee on oil imports

By David Lassell in New York

PRESIDENT JIMMY CARTER'S \$4.62 per barrel oil import fee is an attempt to fight fire with fire. The immediate inflationary impact, he concedes, will be considerable. It will push petrol prices up by 10 cents a gallon (about 8 per cent), adding \$ per cent to the rate of inflation for the rest of this year. But after that, he hopes, the fee will start to hold down consumption and reduce oil imports, which currently account for 44 per cent of the U.S. oil supply.

The fee will be levied on every barrel of imported oil, but its price impact will be channelled exclusively into petrol, which accounts for about 40 per cent of oil the oil consumed in the U.S. Eventually,

Mr. Carter's economic calculator says that the fee will reduce oil imports by about 100,000 barrels a day in the first year, rising to about 250,000 b/d in three years.

The U.S. will probably consume 17m barrels of oil a day this year, putting the saving at less than 1 per cent of the total in the first year, rising to about 2.5 per cent in three years. However, Mr. Carter hopes that together with other conservation measures, the total saving in this year will be about 400,000 barrels.

The fee has a lot of attractions. By jacking up prices, it effectively quickens the pace of the oil price decontrol programme which Mr. Carter launched last year to free domestic production from regulation by October 1981.

The fee should also look good abroad because it will ease the U.S. demands on the world oil market, and bring petrol prices closer to those prevailing elsewhere.

U.S. PETROL PRICES IN CENTS PER U.S. GALLON (Estimated averages of all types and grades)	
November 1978	65
June 1979	82
October 1979	95
March 1980	125
May 1980	145

(FT estimate based on effect of oil price decontrol plus import fee)

## Scepticism on interest rates

October.

Consumer Credit Cutbacks, although limited in scope, are bound to have some marginal effect on manufacturers of consumer goods. The disincentives for expanded use of credit cards will also probably cut retail sales. Sears Roebuck makes 55 per cent of its annual \$18bn sales via credit card.

The strengthened wage-price council. Although many business men do not take the council seriously as an effective inflation-fighting device, the trebling of the council's staff and the inclusion of smaller companies in its monitoring ambit will increase the volume of regulation which U.S. busi-

ness has to deal with.

The President's intention of toughening up compliance with the voluntary wage-price guidelines (the wage limit has just been set at a range of 7½ to 9½ per cent for 1980) could also mean barring violators from federal contracts. Ford Motor has recently been ruled in violation of the guidelines.

Businessmen seem to think that the package is a step in the right direction, although there is considerable scepticism as to whether Mr. Carter and Congress really have the will-power in an election year to make serious expenditure cuts. The fear is that the oil tax will be used to balance the budget.

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## Audible patter of faux pas in the White House corridors

BY IAN HARGREAVES

ALFRED KAHN has, he confesses, "a certain irrational sense of failure," at having been head of President Carter's Wage and Price Council in a period when the rate of inflation has bounded from 8 to 18 per cent.

But the exasperated economics professor, who has been amusing and clarifying some corner or other of the Washington political scene for 40 years, believes there is reason in his unreason. "The motion that any individual can turn around the consumer price index is insane," he says.

Not, perhaps, the most tactful remark from a man in the

professor's position the morning after the President's publication of his programme to beat inflation. Even less tactful. In the light of the approaching Presidential election was his Cassandra-like aside that the gods always made a person mad before they destroy him."

It did not take the eccentricities of Mr. Kahn, however, to inject a streak of March madness into the warm Washington air this weekend.

Before the President was even on his feet in the East Wing of the White House, there was an audible patter of tiny faux pas. Mr. Carter's top economic officials were

with the Press, telling reporters all the things the President would find it too cumbersome to say from the podium, about such subjects as non-depository intermediaries and figures.

The officials did well with the non-depository intermediaries, but when it came to figures, the madness proved catching. First of all, the men who had in the space of three weeks re-written a budget, having seen a dash of light about the inflationary consequences of rising Government expenditure and widening federal deficits, revealed that they had continued to add up the figures

on the way to the Press briefing.

So, half way through the proceedings, the men who are running the U.S. economy went into a quick huddle, assuring their audience: "This is before the event, so now we still have time to correct."

They then revealed that the new petrol tax would raise \$3bn in 1980, rather than \$5bn. Unfortunately, this change in the income forecast had consequences for figures further down the page. Soon the team was embroiled in an untidy and eventually caustic series of exchanges about the precise

nature of those consequences, climaxing with remarks like:

"You have to learn your arithmetic" and "one minus one equals zero."

The East Wing audience did not have the Press's advantage of having thus glimpsed the labyrinthine mathematical complexities of the budgetary exercise. So when the President said: "I will cut the 1981 budget by more than \$18bn," quite a few of the businessmen present were impressed.

Alas, the President meant to say \$13bn. Whether it was the arithmetical pressure or straightforward pressure of state which had caused the

## COMPANY NOTICES

## B.A.S.F. TRANSATLANTICA

7½% 1972-1987 LOAN OF FF 100,000,000

The redemption on 1st May, 1980, for which a sum of FF 40,000,000 is planned, has been completely repurchased on the Stock Exchange.

Amount remaining in circulation after 1st May, 1980:

FF 72,000,000

Paying Agent

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POUR LE GRAND-DUCHÉ DE LUXEMBOURG

DIAMOND CAPITAL LTD.  
Registered Office:  
80 Broad Street, Monrovia (Liberia)

The annual meeting of shareholders of Diamond Capital Ltd. will be held at the offices of Barclays International Ltd., St. James's Square, London SW1, on Thursday 3rd April 1980, at 11 a.m. for the purpose of receiving the annual report and financial statements, the approval of the balance sheet and the results of operations.

Shareholders entitled to attend and vote at the meeting may appoint a proxy to attend and vote instead of him.

Any shareholder who desires to attend or vote at the meeting shall deposit their certificates for shares held on or before 20th March 1980, with Barclays International Ltd., at the address mentioned above.

S. G. WARBURG & CO. LTD.

AKTIEBOLAGET SVENSKA  
EXPORTKREDIT

(Swedish Export Credit Corporation)

U.S. 7½% NOTES 1983

S. G. WARBURG & CO. LTD. announces that the annual redemption of bonds due 1st April 1980, for a nominal value of U.S.\$12,400,000 nominal amount of bonds will remain outstanding after 1st April 1980.

30, Graham Street, London EC2P 2EE. 17th March, 1980.

17th March, 1980.

AKTIEBOLAGET SVENSKA  
EXPORTKREDIT

(Swedish Export Credit Corporation)

U.S. 9½% Notes 1986

S. G. WARBURG & CO. LTD. announces that the annual redemption of bonds due for redemption on 1st April 1980, for a nominal value of U.S.\$14,400,000 nominal amount of bonds will remain outstanding after 1st April 1980.

30, Graham Street, London EC2P 2EE. 17th March, 1980.

17th March, 1980.

AKTIEBOLAGET SVENSKA  
EXPORTKREDIT

(Swedish Export Credit Corporation)

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AKTIEBOLAGET SVENSKA<br

# Higher prices and volume boost Svenska Cellulosa

By VICTOR KAYFETZ in STOCKHOLM

**SVENSKA CELLULOSA**, Sweden's biggest forest products group, has reported pre-tax earnings of SKr 587m (\$125m) for 1979—nearly double the 1978 figure of SKr 273m, and comfortably above the October forecast of SKr 450m.

The proposed dividend of SKr 6.50 per share for 1979, up from SKr 5.50 following adjustment for last year's split, totals SKr 78m. Net adjusted return per share increased from SKr 13 to SKr 23.

Sales rose by 16 per cent to SKr 5.97bn (\$1.39bn). Operating profits climbed from SKr 307m to SKr 559m, and stock gains from SKr 17m to SKr 77m.

Sunds Defibrator, the manu-

facturer of forest industry equipment, however, moved from an operating profit of SKr 12m in 1978 to a loss of SKr 10m.

Earnings in 1980 will be at least the same as in 1979, SCA predicts, with Molmlycke, Sunds Defibrator, Bekab and the packaging companies having excellent prospects of improving profits.

The forest sector will do decidedly better in the first half of 1980 than in the corresponding period of 1979, the preliminary report continues, but second half prospects for this sector are more difficult to predict.

## Sandoz ahead in spite of inflation

By John Wicks in Zurich

**GROUP PROFITS** of the Sandoz chemical group rose by 10.8 per cent last year to SwFr 17.3m (\$8.35m). Earnings were adversely affected by inflationary pressures, which were offset only partially by higher selling prices. However, foreign-currency losses dropped from SwFr 127m to SwFr 62m, despite a further strengthening of the Swiss franc.

The cash-flow for the group—which, it was announced in January, increased its turnover by 3.4 per cent to SwFr 4.44bn (\$2.52bn) in 1979—was up 5.3 per cent to SwFr 432m. Capital investments, down SwFr 26m to SwFr 207m, were financed entirely from a depreciation sum of SwFr 259m. Research and development spending was slightly higher, at SwFr 336m, the equivalent of 8.7 per cent of sales revenue.

## Advance at Exxon-BHP venture in Bass Strait

By JAMES FORTH IN SYDNEY

**ESSO EXPLORATION** and Production Australia, a 50 per cent partner with Broken Hill Proprietary Company in the Bass Strait oil and gas fields, lifted its profit 35 per cent from A\$87.8m to a record A\$119m (US\$130m) in 1979. The dividend to the U.S. parent, Exxon Corporation has been raised from A\$6.4m to A\$8.5m.

The improvement came from higher crude oil and liquefied petroleum gas (LPG) prices and record levels of crude, LPG and natural gas production, the directors said.

The return on the group's total average assets employed of A\$87.8m was 13.6 per cent. Exploration development and other capital expenditure totalled A\$109m, or almost as much as the group's profit, the directors pointed out. They

said that the incentive provided by the Australian Government's crude oil pricing policy led the company to increase significantly expenditure on exploration for oil and gas, which reached A\$35m. In addition the Exxon-BHP joint venture spent A\$183m on construction of new Bass Strait production platforms and associated plant and equipment.

This was A\$54m more than the partners spent in 1978. The partners' exploration and development plans for the Bass Strait over the next four years would cost another A\$1.2bn.

The profit was after royalties, income and other taxes of A\$23.8m. The directors revealed that Esso had revalued its plant and equipment by A\$25.4m to reflect more clearly the current replacement cost of the assets.

## Canadian Tire lifts earnings

By Robert Gibbons in Montreal

**CANADIAN TIRE** Corporation, the major Canadian merchandising group, increased its earnings by 27.2 per cent to C\$6.5m (US\$3.1m), or C\$3.07 a share, in 1979, from C\$2.7m, or C\$2.49, a year earlier. Revenues rose by 17.3 per cent to C\$95.5m (US\$47.9m), from C\$79.8m. The figures for each year exclude extraordinary gains.

Profit for the final quarter was equal to 61 cents a share against 55 cents. The group is the largest merchant of home and automobile equipment through franchised stores. In the present year, lower spending on new homes and cars is expected to shift volume to maintenance and upgrading, providing growth to the group's do-it-yourself products.

The forest sector will do decidedly better in the first half of 1980 than in the corresponding period of 1979, the preliminary report continues, but second half prospects for this sector are more difficult to predict.

Sperry Univac semiconductor division plan

By John Lloyd

**SPERRY UNIVAC**, the computer products division of Sperry Corporation, is to establish a new semiconductor division, and plans a \$30m expansion in its integrated circuit capacity at Egan, Minnesota.

The new division will produce custom design semiconductors, but will continue to procure standard chips from external vendors. The chips will be produced solely for Sperry's own use.

The division will be headed by Mr. R. A. Ericsson, previously vice-president in charge of Sperry's defence division.

Mr. Ericsson said that the new division would enable the company to make greater use of its research and development programmes, and that its establishment reflected the company's confidence in its technology.

## CURRENCIES, MONEY and GOLD

### Gold's soft centre

By COLIN MILLHAM

**IN THE** eight weeks leading up to the peak of \$850 on January 21, gold rose by \$455, and in the same period since it has fallen by \$320. On Friday the metal opened at \$432, and fell quickly to \$427, the lowest level since Christmas Eve.

The January "gold rush" received great publicity as queues of eager coin buyers formed outside banks, and heists were dispatched to the melting pot for scrap value. The media's interest in precious metals has not continued as values have fallen, but those encouraged to sink savings into gold colour earlier this year must rue the day.

Kruggers were offered at £370 and sovereigns at £55 in growing tension in the Middle

East, and the doubling of oil prices in the last year. The resulting inflationary pressure on Western economies, led to a distinct paper currency at a time when oil producers were receiving more money than ever before.

Almost inevitably some of these funds were turned into gold, and the effect on the bullion market was dramatic. Much higher U.S. interest rates, and hopes that the Carter Administration may become to grips with the problems of inflation again, has changed the picture yet again.

The investment intentions of the oil producers will remain a major factor overhanging the bullion market, and another will

be the stability of the whole Middle East. The market had not recovered from concern over Iran and the U.S. hostages when the Soviet Union invaded Afghanistan.

Although the underlying fears of confrontation between East and West remain, if the Russians leave Afghanistan, and the hostages return to the U.S. gold is unlikely to fall very far because it has already fallen by over \$300 in less than two months. On the other hand another flash-point is likely to create a further rise, and on Friday afternoon the market showed signs of recovery on the statement that South Africa may withhold part of its gold production from the market.

Gold's earlier rise reflected

the growing tension in the Middle

**GOLD**

	Mar. 14	Mar. 13
Gold Bullion (fine ounce)		
Gloss.....	\$655.555	\$655.555
Opening.....	5530.535	5530.535
Morning fixing.....	5602.75	5237.901
Afternoon fixing.....	5238.912	5238.912
Gold Coins		
Kruggers.....	5530.550	5530.550
Maples.....	5532.555	5532.555
New Sovereigns.....	5133.138	560.624
King Sovereigns.....	5155.160	570.724
Half Sovereigns.....	5150.180	570.724
French 20s.....	5685.895	5685.895
50 pesos Mexico.....	5680.660	5680.660
100 Cor. Austria.....	5630.520	5630.520
500 Cor. Austria.....	5700.710	5700.710
510 Eagles.....	5725.730	—
55 Eagles.....	—	—

**THE DOLLAR SPOT AND FORWARD**

Days' spread	Close	One month	2 months	3 months	4 months	5 months	6 months
March 14	2.215	2.210	0.32-0.42	0.30	0.37-0.57	0.34	0.41-0.62
UK1	2.010-2.019	2.010-2.019	0.15-0.25	0.15	0.30-0.40	0.34	0.38-0.50
Canada	1.728-1.732	1.728-1.732	0.52-0.67	0.50	1.30-1.20	1.20	1.20-1.30
Nethrlnd	2.0140-2.0195	2.0155-2.0170	0.82-1.05	0.80	3.95-3.85	3.75	3.75-3.95
Switzerland	5.7285-5.7290	5.7285-5.7290	0.35-0.45	0.35	2.25-2.35	2.25	2.25-2.35
W. Ger.	1.8370-1.8405	1.8320-1.8335	1.85-1.75	1.79	4.65-4.55	4.50	4.50-4.65
Portugal	49.45-49.55	49.45-49.55	50-55	50	10-20	10-20	10-20
Spain	62.035-62.050	62.035-62.050	50-70	50	10-20	10-20	10-20
Italy	5.0330-5.0600	5.0330-5.0600	5.25-5.25	5.25	2.75-2.75	2.75	2.75-2.75
Norway	5.0330-5.0600	5.0330-5.0600	5.25-5.25	5.25	2.75-2.75	2.75	2.75-2.75
France	4.2780-4.3000	4.2780-4.2810	2.20-2.30	2.00	4.90-4.70	4.70	4.70-4.90
Sweden	4.2780-4.3070	4.2780-4.3070	2.20-2.30	2.00	6.05-6.05	5.85	5.85-6.05
Austria	1.3130-1.3170	1.3130-1.3170	1.30-1.30	1.27	32.00-32.00	30.00	30.00-32.00
Switzerland	1.7490-1.7700	1.7490-1.7700	2.05-2.05	1.95	13.75	13.75	13.75-15.50

£ and Ireland are quoted in currency. Forward premiums and discounts apply to the U.S. dollar and not to the individual currency.

**EURO-CURRENCY INTEREST RATES**

The following nominal rates were quoted for London dollar certificates of deposit: one-month 18.55-18.65 per cent; three-months 18.80-19.00 per cent; six-months 18.90-19.00 per cent; one year 17.50-17.60 per cent.

**LONDON MONEY RATES**

Mar. 14

Sterling

U.S. Dollar

Canadian Dollar

Dutch Guilder

Swiss Franc

West German Mark

French Franc

Italian Lira

Asian \$

Japanese Yen

Overnight

2 days notice

7 days notice

Month

Three months

Six months

One year

Two years

**THE POUND SPOT AND FORWARD**

March 14	£	\$	Notes	
Argentina Peso	5800.3886	1721.1728	Austria	26.80-29.05
American Dollar	2.0215-2.0285	5.0100-5.0155	Bahrain	2.00-2.00
Brazil Cruizero	18.82-103.85	46.60-48.80	Barbados	12.00-12.70
Finland Markka	5.53-5.54	5.6850-5.6860	Denmark	9.40-9.46
Great Britain	87.00-87.00	55.80-55.80	Germany	4.04-4.07
Hong Kong Dollar	11.07-11.09	5.00-5.00	Hong Kong	1.00-1.00
Iran Rial	n/a	n/a	Iceland	520.525
Kuwait Dinar(D)	0.0020-0.0021	0.2760-0.2761	Indonesia	4.44-4.47
Luxembourg	1.0370-1.0385	1.0265-1.0275	Iran	11.12-11.20
New Zealand \$	12.5070-12.5120	1.0425-1.0440	Iceland	1.00-1.00
Switzerland	1.0250-1.0260	1.0250-1.0260	Malta	1.05-1.05
U.S. Dollar	5685.895	5685.895	Malta	1.05-1.05
U.K. £	5630.520	5630.520	Malta	1.05-1.05
U.S. £	5700.710	5700.710	Malta	1.05-1.05
U.S. \$	5725.730	5725.730	Malta	1.05-1.05
U.S. \$	5725.730	5725.730	Malta	1.05-1.05
U.S. \$	5725.730	572		

## AUTHORISED UNIT TRUSTS

Abbey Unit Tst. Mngrs. (a)

72-50, Gloucester Rd, Aldershot

0344 5041

Abbey Capital

25-26, 38-40, 42-43

Abbey General

25-26, 43-44

Abbey Ind. Tst. Mngrs. (a)

10-11, 13-14, 16-17

Abbey Income

25-26, 43-44

Abbey Ind. Ret. Tst. Mngrs. (a)

10-11, 13-14, 16-17

Abbey Income Fund

25-26, 43-44

Abbey Prop. Trust (a)

25-26, 43-44

Abbey Ret. Fund

25-26, 43-44

Abbey Unit Tst. Mngrs. (a)

45, Corstall, London EC3V 3PB

01-623 6314

Abbey Unit Tst. Mngrs. (a)

74-24, 13-17

Alles Harvey & Ross Unit Tst. Mngrs. (a)

25-26, 43-44

Allied Maritime Group (a) (g)

10-11, 13-14, 16-17

Allied Maritime Fund

25-26, 43-44





